Color Television

Instructions for use

This television contains;







GEMSTAR IS NOT IN ANY WAY LIABLE FOR THE ACCURA-CY OF THE PROGRAM SCHEDULE INFORMATION PRO-VIDED BY THE GUIDE PLUS+* SYSTEM. IN NO EVENT SHALL GEMSTAR BE LIABLE FOR ANY AMOUNTS REPRE-SENTING LOSS OF PROFITS, LOSS OF BUSINESS, OR INDI-RECT, SPECIAL, OR CONSEQUENTIAL DAMAGES IN CON-NECTION WITH THE PROVISION OR USE OR ANY INFOR-MATION, EQUIPMENT, OR SERVICES RELATING TO THE GUIDE PLUS+* SYSTEM.

VCR Plus+*, C3, PlusCode and GUIDE Plus+* are registered trademarks of Gemstar Development Corporation.

The VCR Plus+[®] and GUIDE Plus+[®] systems are manufactured under license from Gemstar Development Corporation and VCR Index Systems B. V., respectively.

Manufactured under license from Dolby Laboratories.

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

A VCR is required for VCR Plus+® operation.









Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once. And take advantage of these important benefits.

Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

Congratulations on your **purchase**, and welcome to the "family!"

PHILIPS



Dear PHILIPS product owner:

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the PHILIPS "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction. All of this is our way of saying welcome-and thanks for investing in a PHILIPS product. Sincerely,

Robert Minkhorst President and Chief Executive Officer

P.S. Remember, to get the most from your PHILIPS product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!

Know these **Safety** symbols



This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, and fully insert.

ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

PHILIPS Visit our World Wide Web Site at http://www.philipsusa.com

SAFETY INSTRUCTIONS - Read before operating equipment

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

- 1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
- Retain Instructions The safety and operating instructions should 2. be retained for future reference.
- Heed Warnings All warnings on the appliance and in the operating 3. instructions should be adhered to.
- Follow Instructions All operating and use instructions should be 4. followed.
- Water and Moisture The appliance should not be used near water 5. - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
- Carts and Stands The appliance should be used only with a cart or 6. stand that is recommended by the manufacturer.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

- 6B. Tilt/Stability All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.
 - Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
 - Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
- Wall or Ceiling Mounting The appliance should be mounted to a 7. wall or ceiling only as recommended by the manufacturer.
- Ventilation The appliance should be situated so that its location or 8. position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a builtin installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- Heat The appliance should be situated away from heat sources 9. such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- Power Sources The appliance should be connected to a power sup-10 ply only of the type described in the operating instructions or as marked on the appliance.

- 11. Power-Cord Protection Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
- 12. Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- 13. Power Lines An outdoor antenna should be located away from power lines.
- Outdoor Antenna Grounding If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mats and supporting structure grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antennadischarge unit, connection to grounding electrodes and requirements for the grounding electrode. See Fig. below.

- 15. Non-use Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- Object and Liquid Entry Care should be taken so that objects do not 16 fall and liquids are not spilled into the enclosure through openings.
- Damage Requiring Service The appliance should be serviced by qualified service personnel when:
 - The power supply cord or the plug has been damaged; or A.
 - B. Objects have fallen, or liquid has been spilled into the appliance;
 - or C.
 - The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - F. The appliance has been dropped, or the enclosure damaged.
- Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

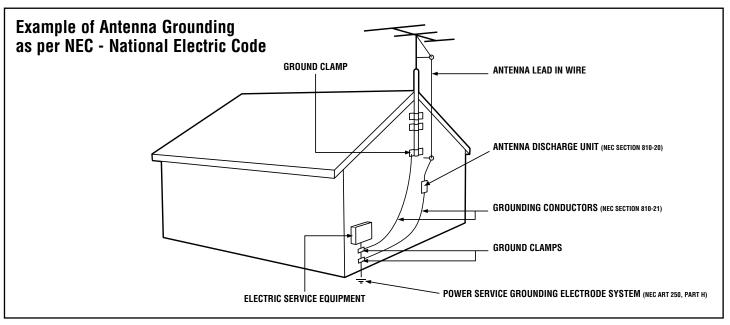


TABLE OF CONTENTS

4

Introduction
♦ Welcome/Registration of Your TV
♦ Safety/Precautions
♦ Table of Contents
♦ Features
ONSCREEN MENU
A Picture
♦ Adjusting the Picture
Features
♦ Turning ON the Dynamic Noise Reduction
Control
♦ Turning ON the ImageMax TM Control7
♦Using the Closed Captioning Control
♦ Using the Screen Format Control
♦ Activating the Blue Mute Control10
♦ Activating the Guide Plus+ [®] Demo11
♦Using the Sleep Timer Control
 ★ The Timer Feature ★ The Timer – Setting the Clock
♦ The Timer – Setting the Start Time
♦ The Timer – Setting the Start Time
♦ The Timer – Selecting the Channel
♦ The Timer – Selecting the Tuner
♦ The Timer – Setting Activate to ON or OFF
\Rightarrow The Timer – Turning ON the Timer Display
△ The AutoLock [™] Feature
♦ Understanding AutoLock TM
♦ AutoLock TM – Setting Up the Access Code
♦ AutoLock TM – Blocking Channels
♦ AutoLock TM – Blocking by Movie Rating
$AutoLock^{TM}$ – Blocking by TV Rating
$AutoLock^{TM}$ – Turning Block ON or OFF
$AutoLock^{TM}$ – Blocking Unrated
Broadcasts
♦ AutoLock [™] – Blocking Broadcasts That
6
Have No Rating
♦ AutoLock TM – Reviewing Your Settings
Programming
Sound
Sound – Adjusting the Treble, Bass, and $\langle \eta \rangle$
and Balance
♦ Sound – Setting the Volume
♦ Sound – Using the AVL (Audio Volume
Leveler)
♦ Sound – Using Incredible Surround
♦ Sound – Adjusting the Headphone Control
♦ Sound – Setting the TV for Stereo and
SAP (Second Audio Program)
♦ Sound – Setting the Audio Out Control
♦ Sound – Using the TV Speaker Control
and Audio Output Jacks
♦ Sound – Using the Surround Sound
External Speaker Connections
♦ Sound – Using the Audio/Video
Input Jacks

🐼 Remote Control Operation
♦ Remote Control – Using AutoPicture [™]
♦ Remote Control – Using AutoSound TM
♦ Remote Control – Using Channel Surf
♦ Remote Control – Using the VCR Plus+® Feature44
The PIP (Picture-in-Picture) Feature
➡ ◆ PIP – Basic Connections
♦PIP – Selecting the Signal Source
♦PIP – Remote Control Buttons
♦PIP – PIP Window size and Double Window PIP48
♦PIP – Adjusting the Color and Tint
♦PIP – More Connections
General Information
\Rightarrow Troubleshooting
♦ Glossary of Television Terms
♦Index
♦Limited Warranty

NOTE: This owner's manual is used with several different television models. Not all features (and drawings) discussed in this manual will necessarily match those found with your television system. This is normal and does not require that you contact your dealer or request service.

END-OF-LIFE DISPOSAL

Your new television and its packing contain materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and minimize the amounts that need to be properly disposed.

Your product also uses batteries that should not be thrown away when depleted, but should be handed in and disposed of as small chemical waste.

When you replace your existing equipment, please find out about the local regulations regarding disposal of your old television, batteries, and packing materials.

AutoChron, AutoLock, AutoPicture, AutoSound, M-Link, and ImageMax are trademarks of Philips Consumer Electronics Company. Copyright © 2000 Philips Consumer Electronics Company. All rights reserved.

Features

Audio/Video Jack Panel allows direct connections with VCRs, DVDs, or other devices, providing quality TV picture and sound playback.

Audio Volume Leveler (AVL) Control keeps the TV sound at an even level. Peaks and valleys that occur during program changes or commercial breaks are reduced, making for a more consistent, comfortable sound.

AutoLockTM allows you to block the viewing of certain channels or programs with certain ratings if you do not want your children to view inappropriate materials.

Auto Programming scans (when activated) for all available channels from regular antenna or cable signals and stores only active broadcast stations in the TV's memory.

AutoPicture[™] allows you to change the picture settings (color, tint, contrast, etc.) for various types of programming, such as sports, movies, multimedia (games), or weak signals with the push of one button.

AutoSound[™] allows you to select from three factory-set controls and a personal control that you set according to your own preferences through the onscreen Sound menu. The three factory-set controls (Voice, Music, and Theatre) enable you to tailor the TV sound so as to enhance the particular programming you are watching.

Channel Edit allows you to add or delete channels from the list stored in the TV's memory. Channel Edit makes it easy to limit or expand the number of channels that are available to you when you press the Channel (+) or (-) buttons on your remote control.

Closed Captioning allows the viewer to read TV program dialogue or voice conversations as onscreen text.

Gemstar Guide Plus+[®] gives the user a listing of current programming right on the TV screen. Can be used to set recordings of certain programs, get up to date news bulletins, and much more.

ImageMax[™] helps you sharpen the picture quality by making dark portions of the picture darker and light portions brighter.

Infrared Remote Control works your TV and other remote-controlled devices, such as VCRs, DVD players, cable converters, and satellite receivers.

Infrared Remote (IR) Blaster works with the M-Link feature to enable your TV to "learn" the remote-control commands of new Philips devices or multibrand devices that you have connected to your TV. After the commands are learned, you can use your TV remote control to operate and control all of the devices.

M-LinkTM allows you to convert your TV into a home-cinema control center composed of up to six devices (including an audio amplifier). You activate the devices by pressing macro buttons and control the devices by pressing "hot" buttons on your remote control. Choose from cable box, digital set top box, DVD (digital video disc), laser disc (LD), satellite digital TV, VCD (video compact disc), and VCR (video cassette recorder) devices. (*IR Blaster must be plugged in before turning the TV ON*.)

Onscreen Menu shows helpful messages and instructions for setting TV feature controls (can be viewed in English, French, or Spanish).

Sleep Timer automatically turns the TV OFF after a set amount of time that you choose.

Standard Broadcast (VHF/UHF) or Cable TV (CATV) channel capability allows for viewing by antenna or cable.

Stereo capability, including a built-in audio amplifier and twin-speaker system, allows for the reception of TV programs broadcast in stereo sound.

Surf Button allows you to easily switch among only the channels that are of interest to you (the ones that you have programmed into the TV's Surf control through the onscreen menu).

Timer allows you to set your TV to turn itself ON and OFF once or daily like an alarm clock.

QUICK USE AND INSTALLATION GUIDE

Use the simple *Quick Use and Installation Guide* (supplied with your TV information peaket) for datails on:

packet) for details on:

 Cable/Antenna Hookups



- Automatic Channel
 Programming
- Channel Editing
- Basic Operation of the TV and Remote Control
- Selection of the Onscreen Menu Language

M-LINK INSTRUCTIONS FOR USE

Use the simple *M*-Link Instructions for Use (supplied with your TV information packet) for details on:

- Operating Accessory Devices (VCR, DVD, Cable Box, and Others)
- Automatic Programming Via the TV Remote Control



- Setting Up Personal Commands
- Inputting Commands from the Remote Controls of Your Accessory Devices

GEMSTAR GUIDE PLUS+® GUIDE

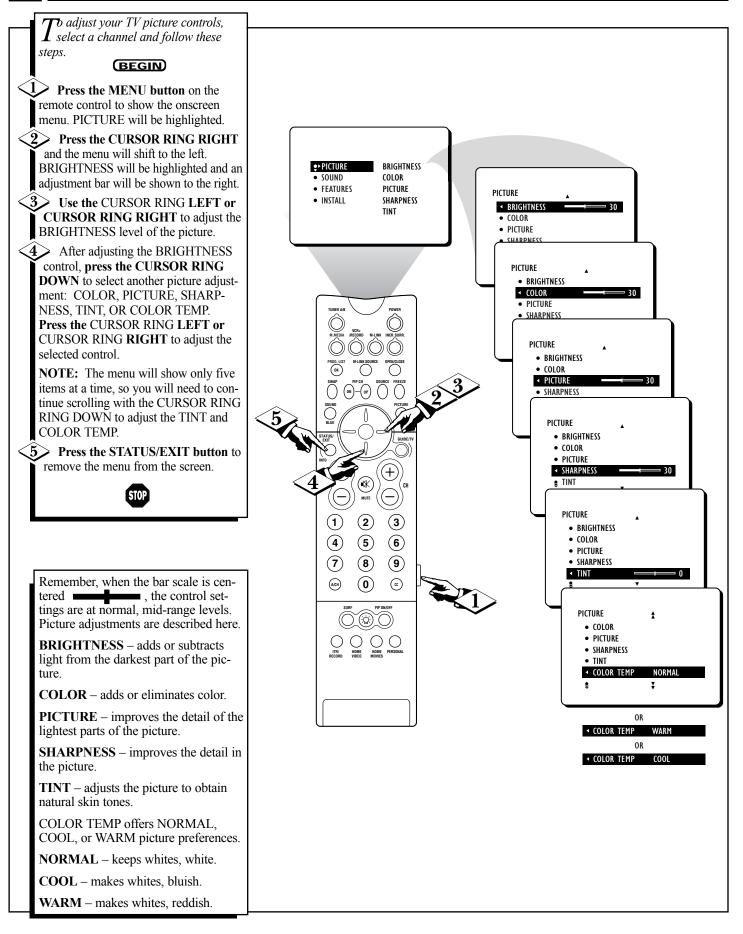
Use the simple *Guide Plus*+[®] *Guide* (supplied with your TV information packet) for details on:

 Television Program Listings

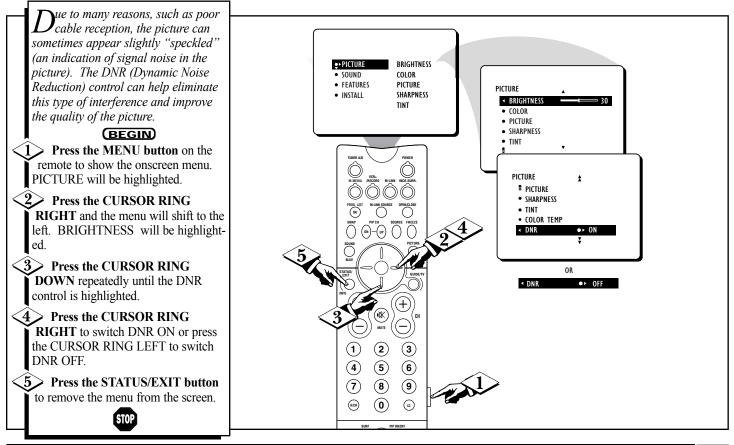
Cilit(and	The second	the Robert Pa	ADDITION BORDER STOL	CORP. ALL, INC.
		I BE Plan ¹⁴ Weld Kunse Kolse BE Plan ¹⁴ Weld Har Plan Kunj BE Plan ¹⁴ Weld Har Plan Kunj BE Plan ¹⁴ Weld Plan ¹⁴ Weld ¹⁵ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶	BATTALIBATANA	
CONTRACTOR CON	Conjunction Construction Co	And this There and Party 11 and how and 41 (prof) instright is and is branch of the horizontal and is source (CBB) Parts (CBB) pages blans. No. 10.4 (program blans. Mark Mark (BB) (Party and Santa Mark Mark (BB) (Party and Santa Mark Mark (BB) (Party and Santa Mark Mark (BB) (Party and Santa (Party and Santa) (Party and Santa) (Party an	A de TADRE PARA CUERT de Carlos Carlos y de Altas de Carlos de Carlos y de Altas de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Carlos de Car	And The And The And The And The And The And The And The And Th

- Setting the TV to Watch a certain Broadcast when it's Programmed to Air.
- Set a VCR Plus+[®] Recording
- Receive Current Information Regarding Upcoming Shows, Specials and News
- Sort by Movies, Sporting Events or Children's Programming

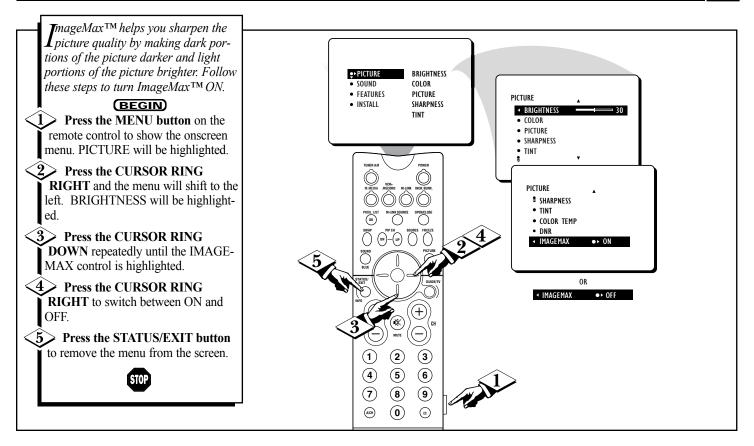
ADJUSTING THE PICTURE



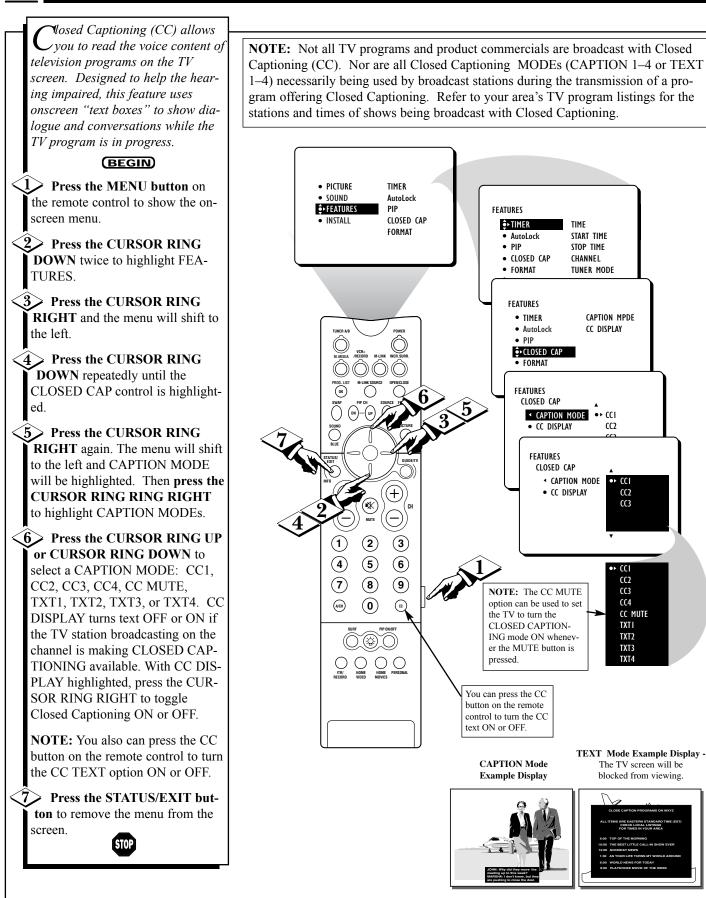
TURNING ON THE DYNAMIC NOISE REDUCTION CONTROL



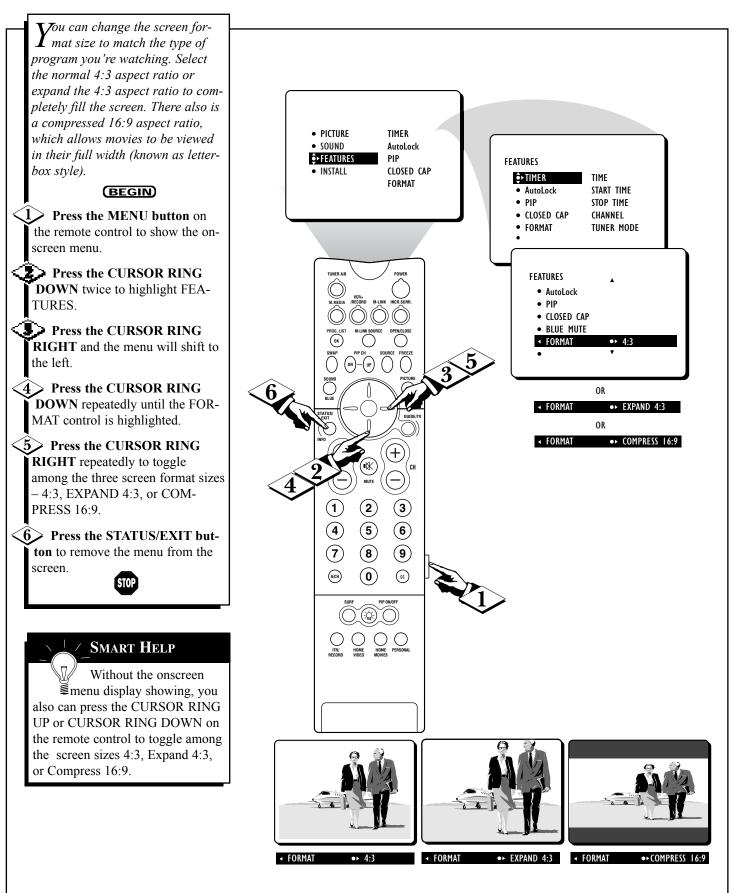
TURNING ON THE IMAGEMAXTM CONTROL



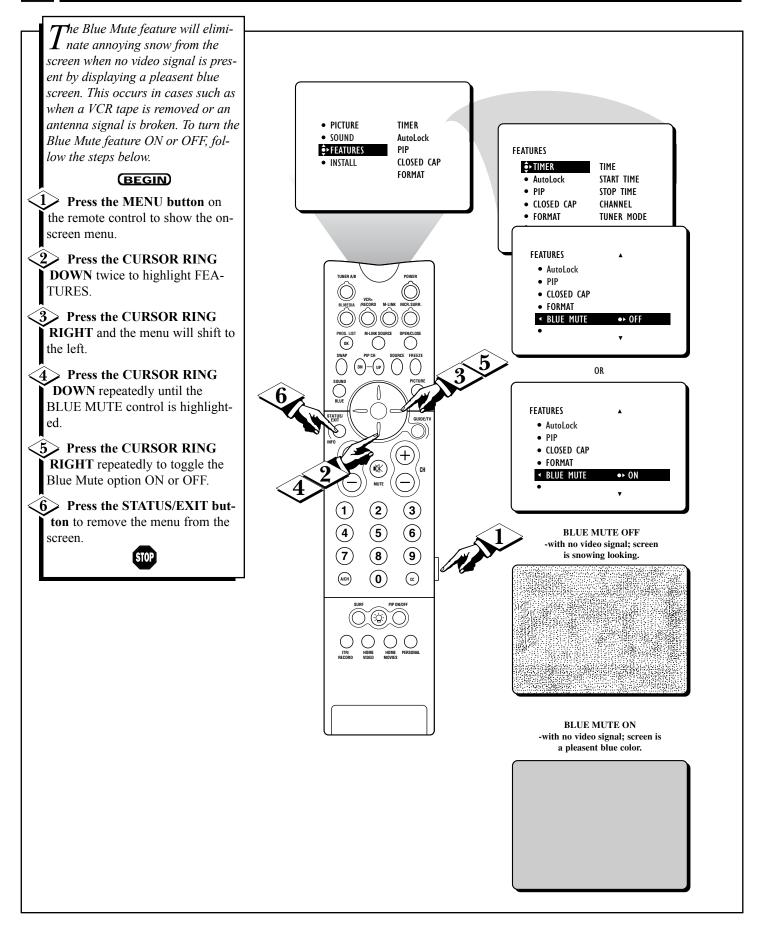
USING THE CLOSED CAPTIONING CONTROL



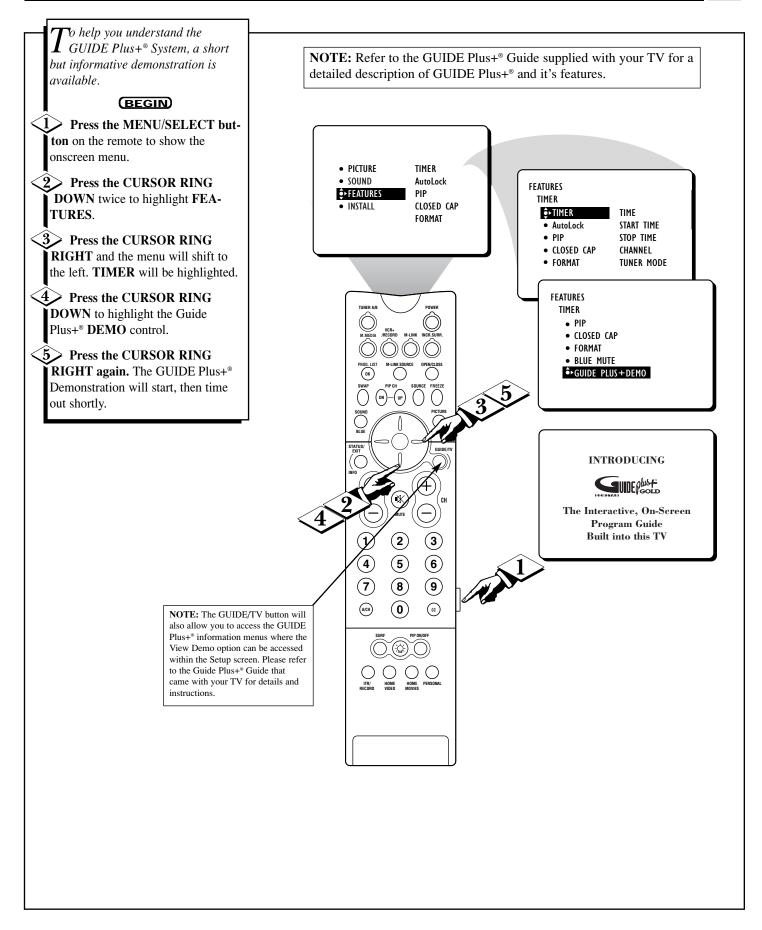
SELECTING THE SCREEN FORMAT SIZE



ACTIVATING THE BLUE MUTE CONTROL



ACTIVATING THE GUIDE PLUS+[®] DEMO



USING THE SLEEP TIMER

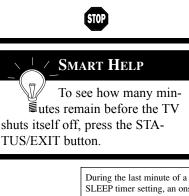
Have you ever fallen asleep in front of the TV, only to have it wake you up at two in the morning with a test pattern sound screeching in your ears? Well, your TV can enable you to avoid that discomfort by automatically turning itself off. With the Sleep Timer feature, you can set a timer to automatically switch the TV OFF after a period of time you choose (15-minute increments up to 60 minutes, then 30-minute increments up to 90 minutes, then 60-minute increments up to 240 minutes).

(BEGIN)

Press the SLEEP button on the remote control. The SLEEP timer onscreen display will appear in the upper part of the screen.

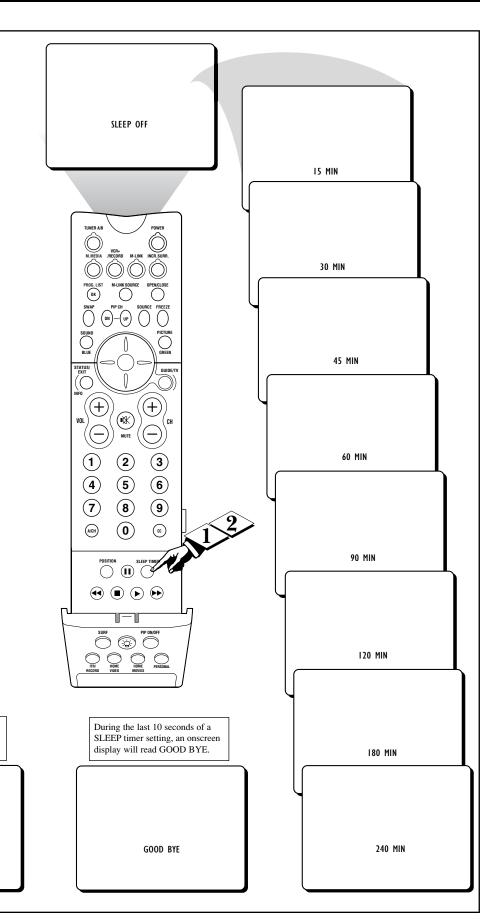
2 Within five seconds, press the SLEEP button repeatedly to pick the amount of time (15-minute increments up to 60 minutes, then 30-minute increments up to 90 minutes, then 60-minute increments up to 240 minutes) before the TV will turn itself off.

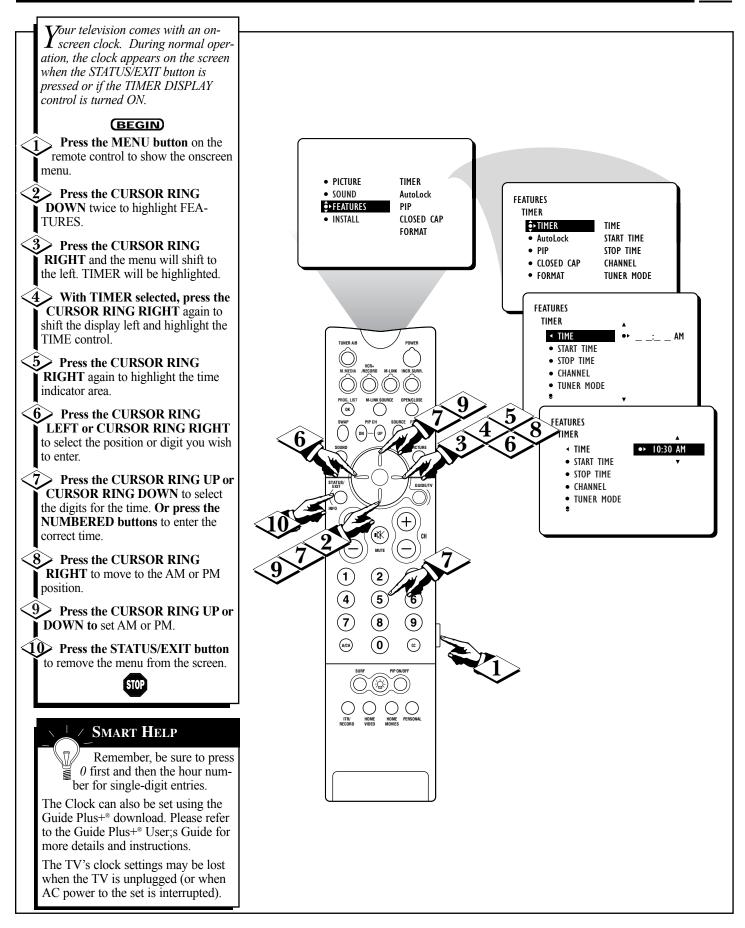
An onscreen countdown will appear during the last minute before the TV shuts itself off.



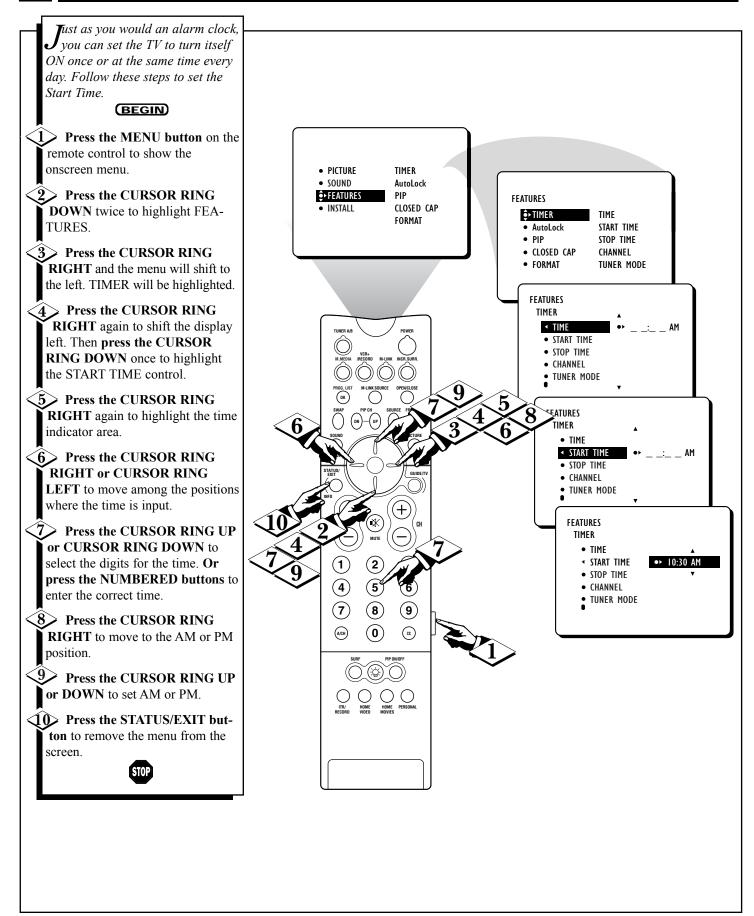
During the last minute of a SLEEP timer setting, an onscreen countdown will be displayed.

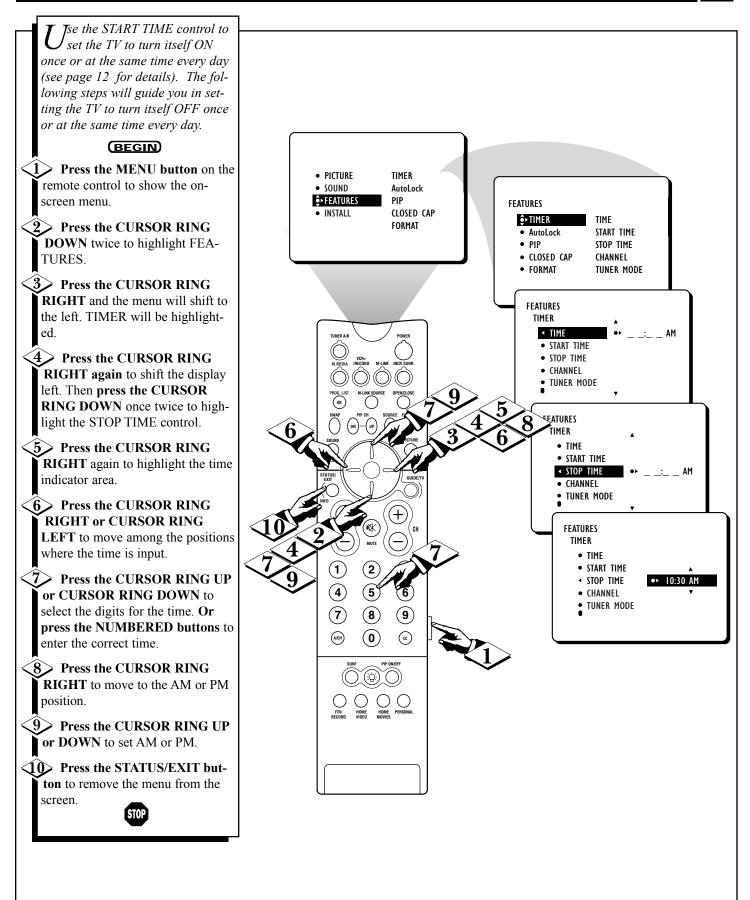
50 SEC



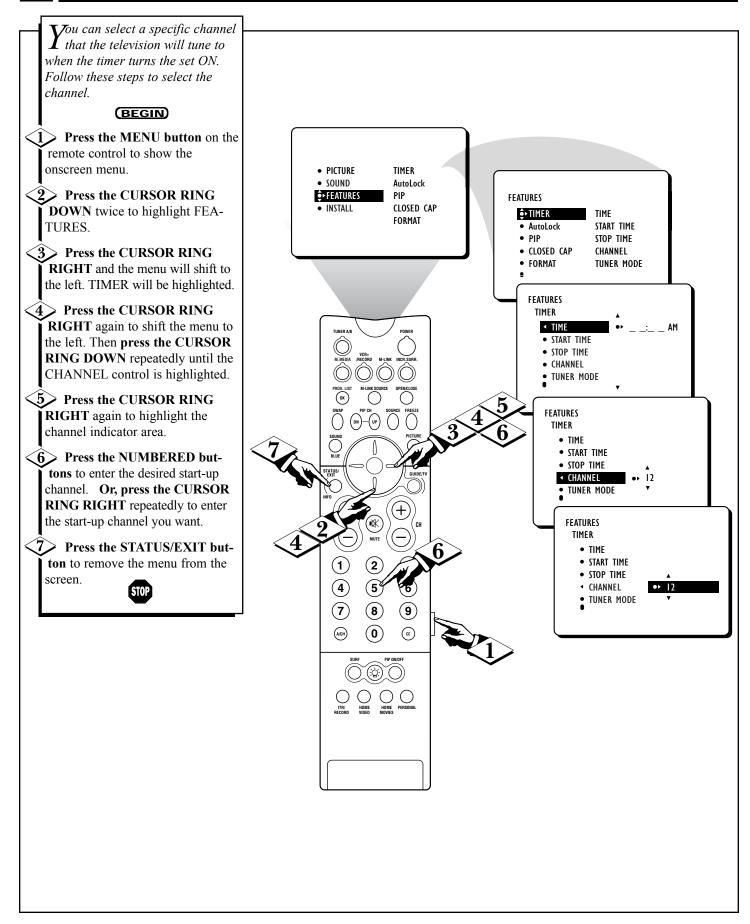


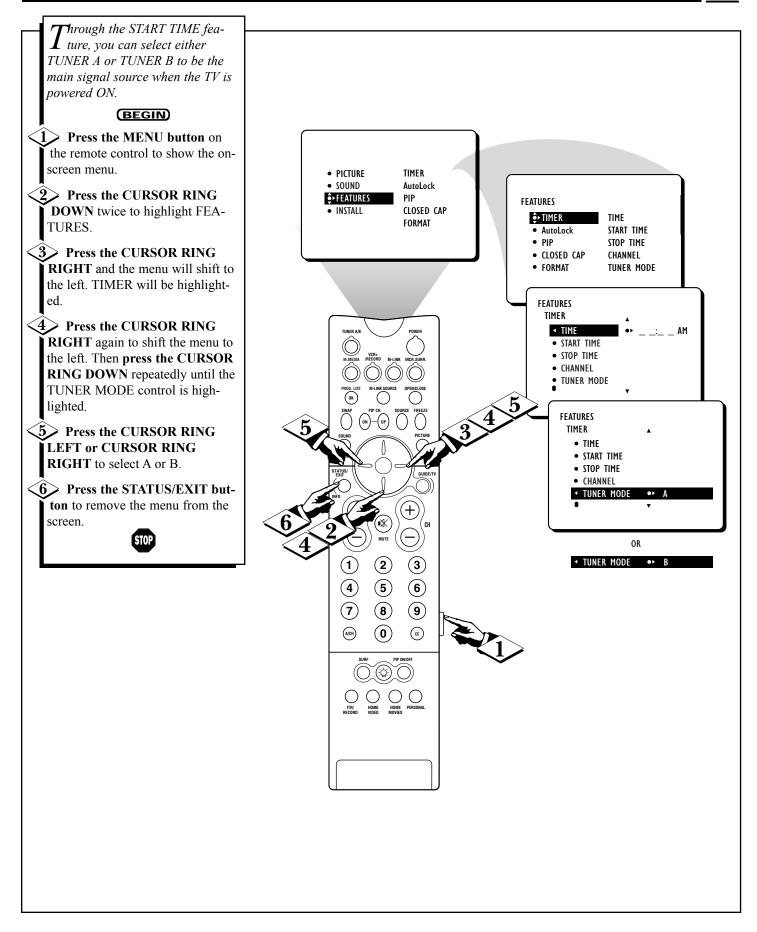
THE TIMER – SETTING THE START TIME

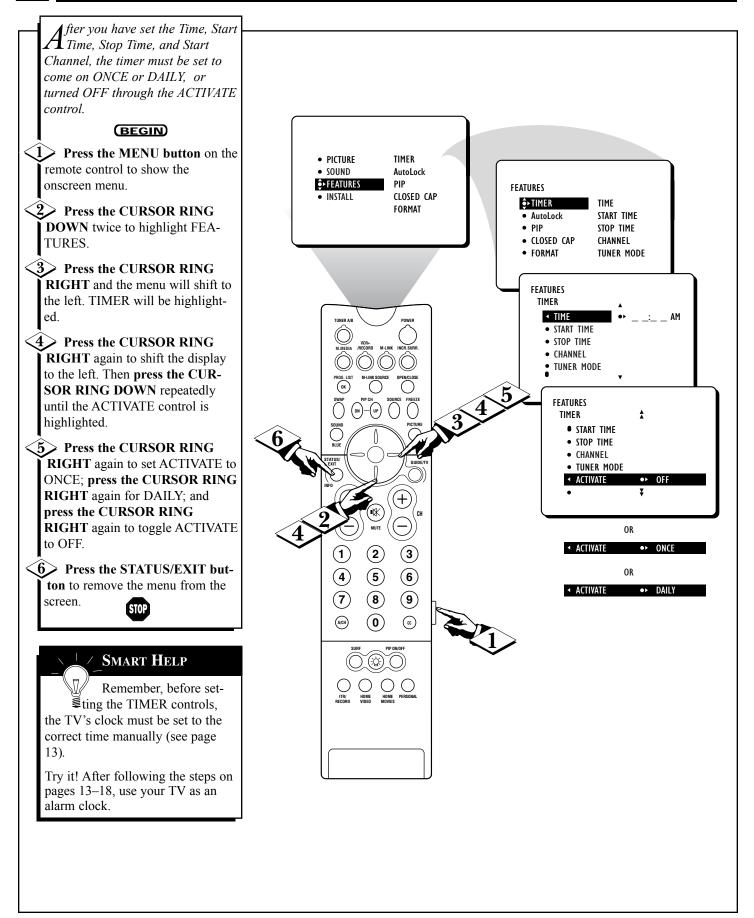




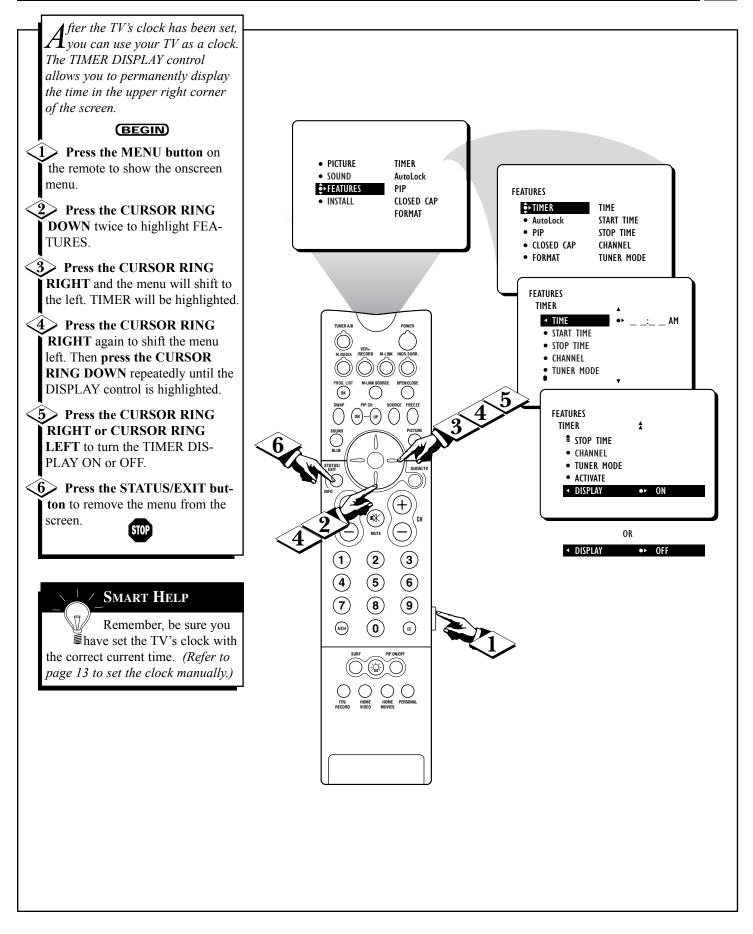
THE TIMER – SELECTING THE CHANNEL







THE TIMER – TURNING ON THE TIMER DISPLAY



UNDERSTANDING AUTOLOCKTM

The AutoLock[™] feature receives and processes data sent by broadcasters or other program providers that contain program content advisories. When programmed by the viewer, a TV with AutoLock[™] can respond to the content advisories and block program content that may be found objectionable (such as offensive language, violence, sexual situations, etc.). This is a great feature to censor the type of programming children may watch.

In the AutoLockTM section, you'll learn how to block channels and programming that is not rated, is unrated, or has no rating. You will also find out how to turn these blocking features ON or OFF. Following are brief explanations of some terms and ratings related to the AutoLockTM feature.

AutoLock[™] offers various Blocking Options from which to choose:

BLOCKING: The BLOCKING control is what can be thought of as the "master switch" for AutoLockTM. This control affects the settings you have chosen for blocking programs according to movie ratings or TV ratings, or for blocking programs that have no rating or are unrated. When the BLOCKING control is OFF, the blocking or censoring of programs is disabled. When the BLOCKING control is ON, blocking will occur according to the settings you have chosen.

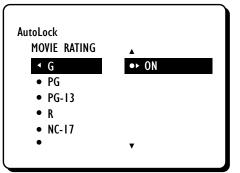
BLOCK UNRATED: ALL unrated programs will be blocked if this feature is set to ON.

UNRATED programming is encoded with information from the MPAA (Motion Picture Association of America) or TV broadcasters, but it does not have a specific rating. In other words, the MPAA or the TV broadcasters have chosen not to assign a rating to the programming.

NO RATING: ALL programming with no content advisory data can be blocked if NO RATING is set to ON.

Programming that has No Rating is not encoded with any rating information from the MPAA or the Parental Guidelines. Any programming could fall into this category.

You also can block individual channels or block programming based on ratings of the MPAA and TV broadcasters. (See a description of the ratings on this page.)



AutoLock TV RATING < TV-Y • TV-Y7 • TV-G • TV-PG • TV-14 • ▼

MOVIE RATINGS (Motion Picture Association of America)

G: General Audience - All ages admitted. Most parents would find this programming suitable for all ages. This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

PG: Parental Guidance Suggested - This programming contains material that parents may find unsuitable for younger children. It may contain one or more of the following: Moderate violence, some sexual situations, infrequent coarse language, or some suggestive dialogue.

PG-13: Parents Strongly Cautioned - This programming contains material that parents may find unsuitable for children under the age of 13. It contains one or more of the following: violence, sexual situations, coarse language, or suggestive dialogue.

R: Restricted -This programming is specifically designed for adults. Anyone under the age of 17 should view this programming only with an accompanying parent or adult guardian. It contains one or more of the following: intense violence; intense sexual situations; strong, coarse language; or intense-ly suggestive dialogue.

NC-17: No one under the age of 17 will be admitted. - This type of programming should be viewed by adults only. It contains graphic violence; explicit sex; or crude, indecent language.

X: Adults Only - This type of programming contains one or more of the following: very graphic violence, very graphic and explicit or indecent sexual acts, very coarse and intensely suggestive language.

TV PARENTAL GUIDELINES (TV BROADCASTERS)

TV-Y: (All children -- This program is designed to be appropriate for all children.) Designed for a very young audience, including children ages 2-6. This type of programming is not expected to frighten younger children.

TV-Y7: (Directed to Older Children -- This program is designed for children ages 7 and above.) It may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. This programming may include mild fantasy and comic violence (FV).

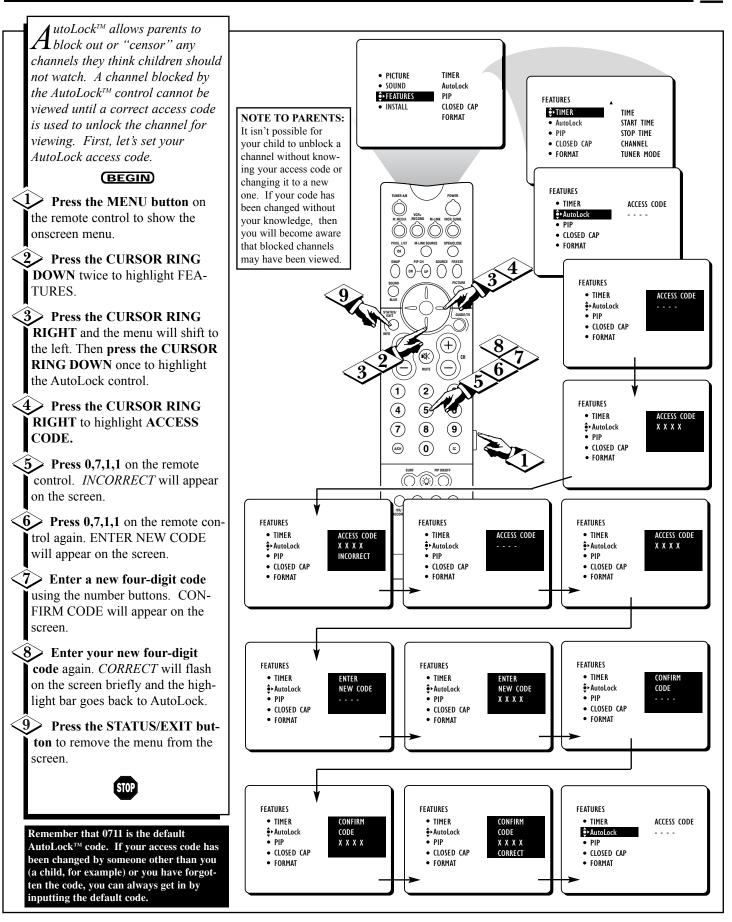
TV-G: (General Audience -- Most parents would find this program suitable for all ages.) This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

TV-PG: (Parental Guidance Suggested -- This program contains material that parents may find unsuitable for younger children.) This type of programming contains one or more of the following: Moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).

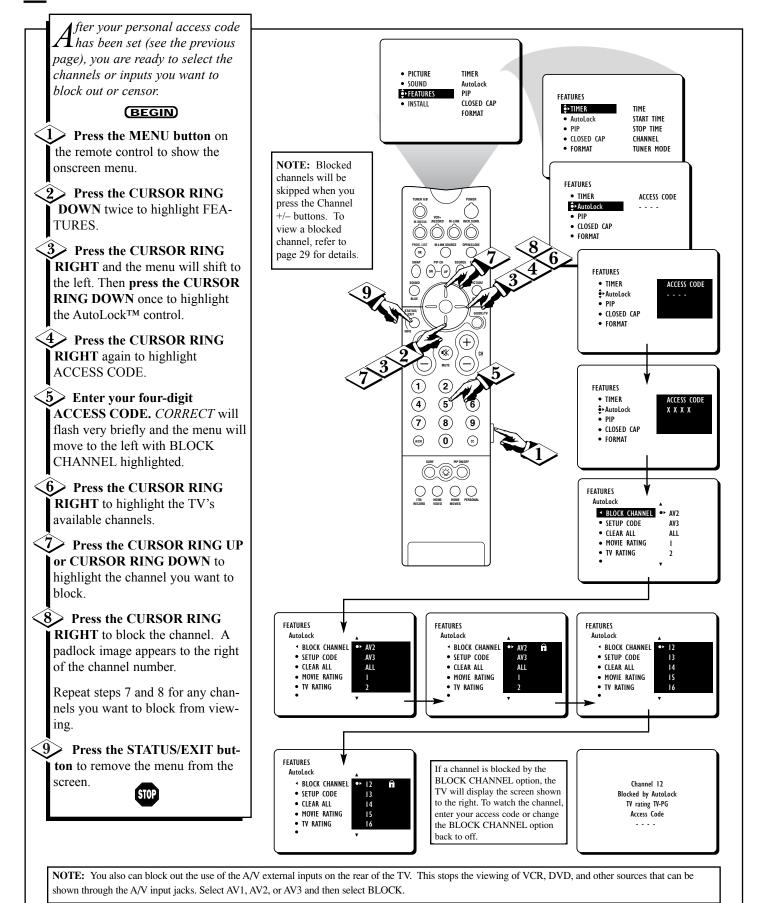
TV-14: (Parents Strongly Cautioned -- This program contains some material that many parents would find unsuitable for children under 14 years of age.) This type of programming contains one or more of the following: intense violence (V); intense sexual situations (S); strong, coarse language (L); or intensely suggestive dialogue (D).

TV-MA: (Mature Audience Only --This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17.) This type of programming contains one or more of the following: graphic violence (V); explicit sexual situations (S); or crude, indecent language (L).

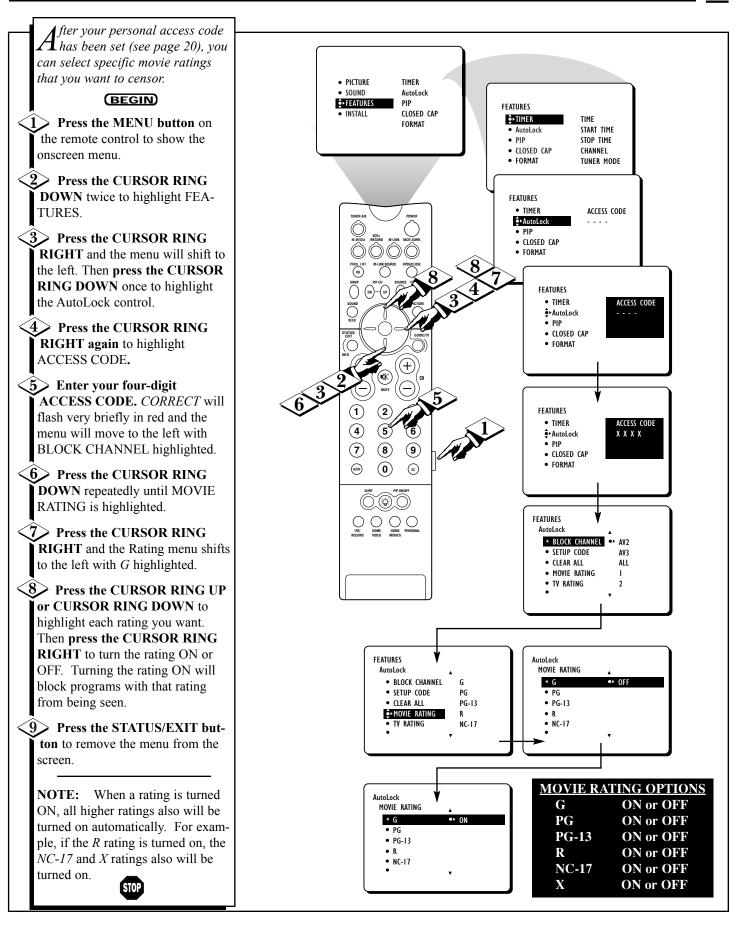
AUTOLOCKTM – SETTING UP THE ACCESS CODE



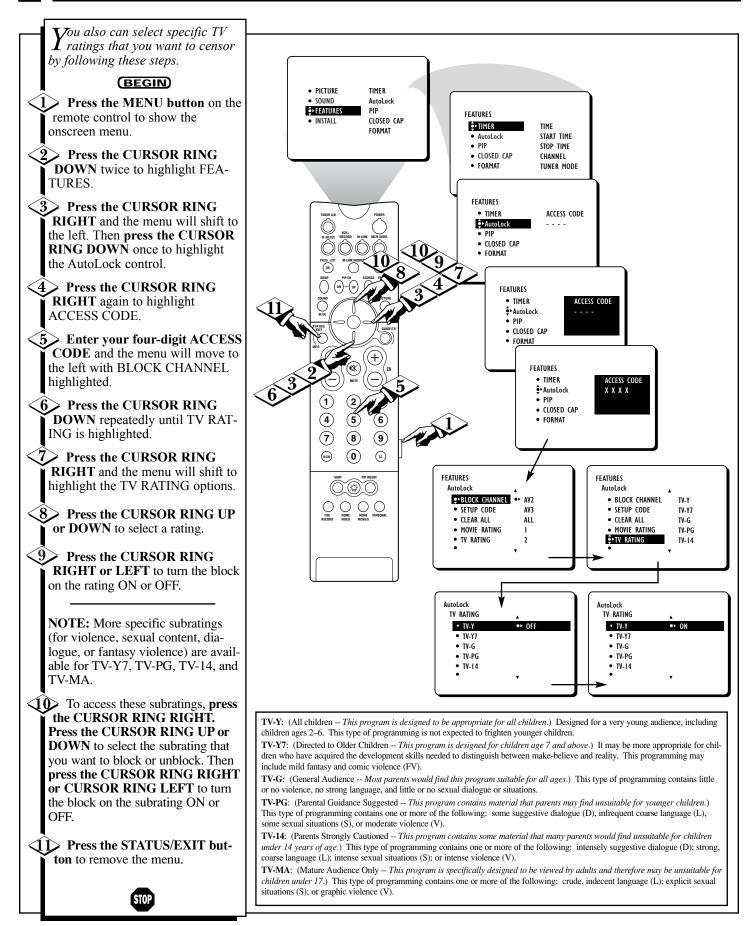
AUTOLOCKTM – BLOCKING CHANNELS



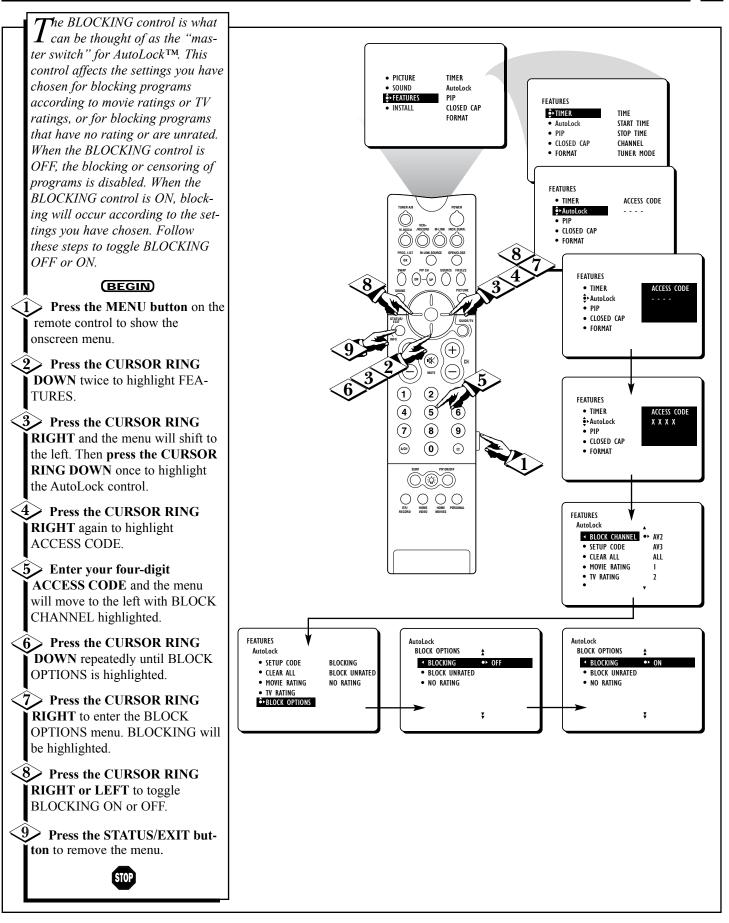
AUTOLOCKTM – BLOCKING BY MOVIE RATING



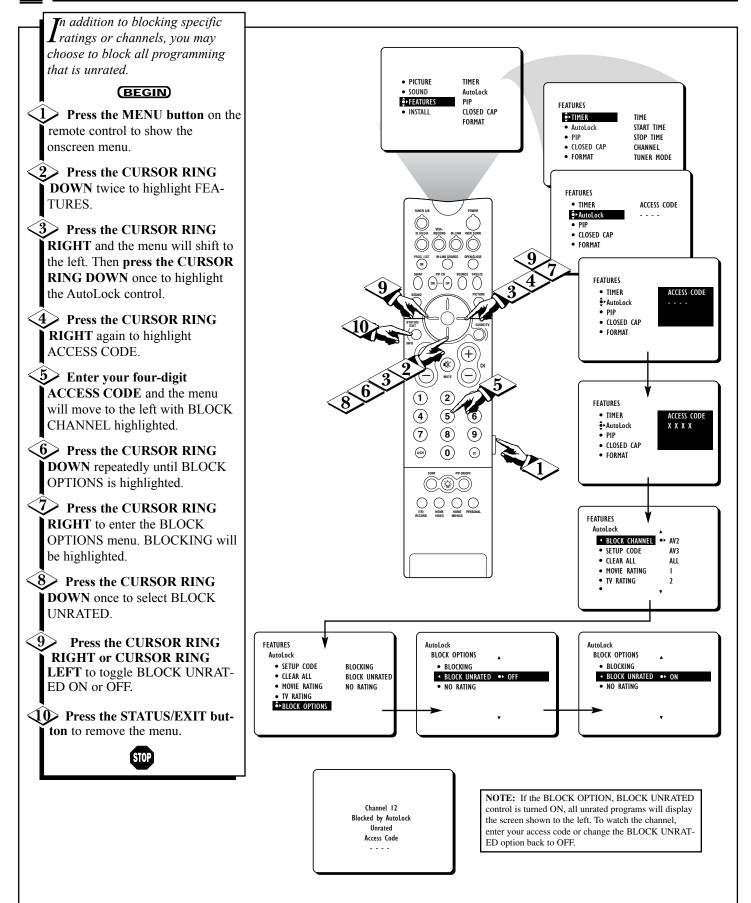
AUTOLOCKTM – BLOCKING BY TV RATING



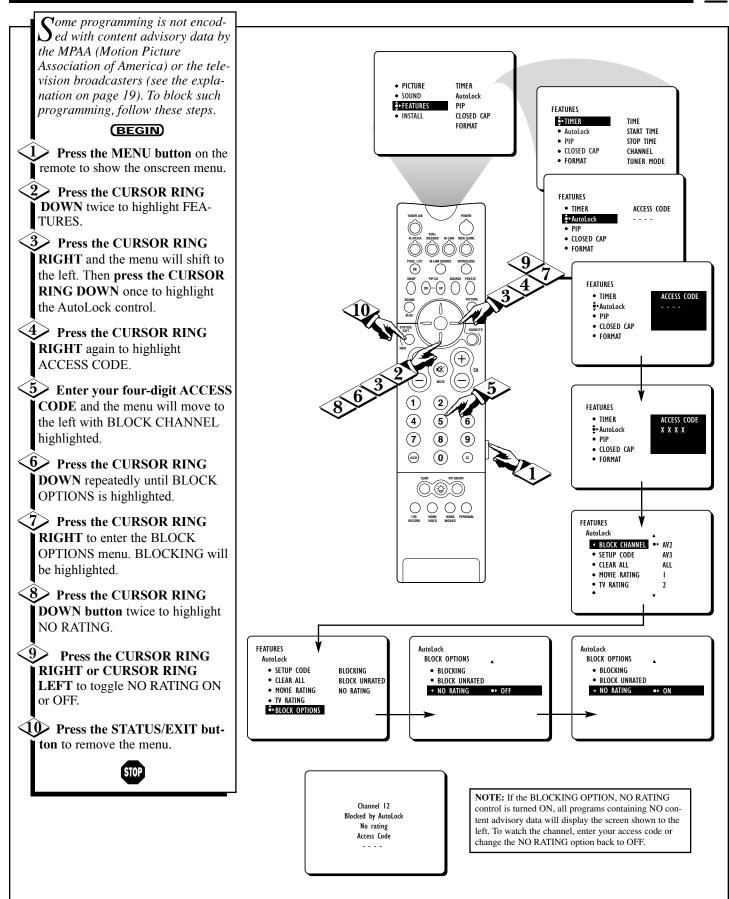
AUTOLOCKTM – TURNING BLOCK ON OR OFF



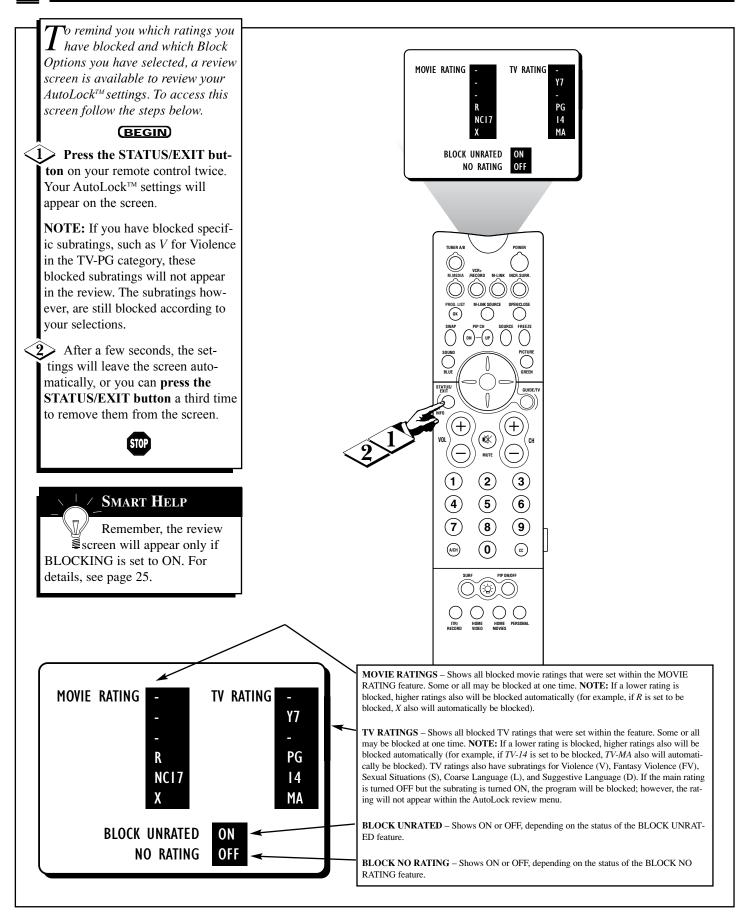
AUTOLOCKTM – BLOCKING UNRATED BROADCASTS



AUTOLOCKTM – BLOCKING BROADCASTS THAT HAVE NO RATING

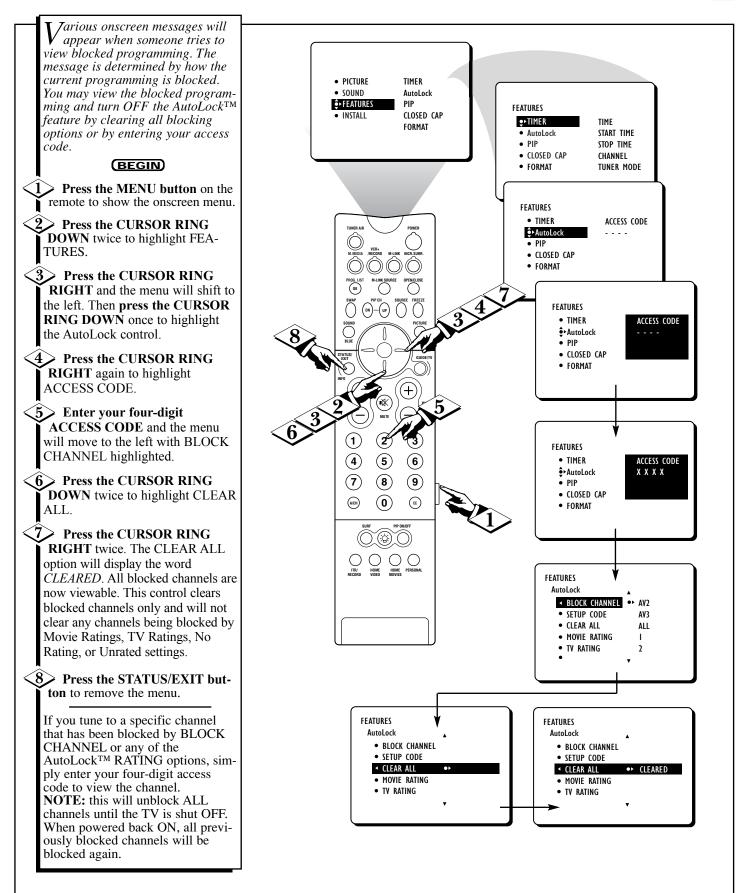


AUTOLOCKTM – REVIEWING YOUR SETTINGS

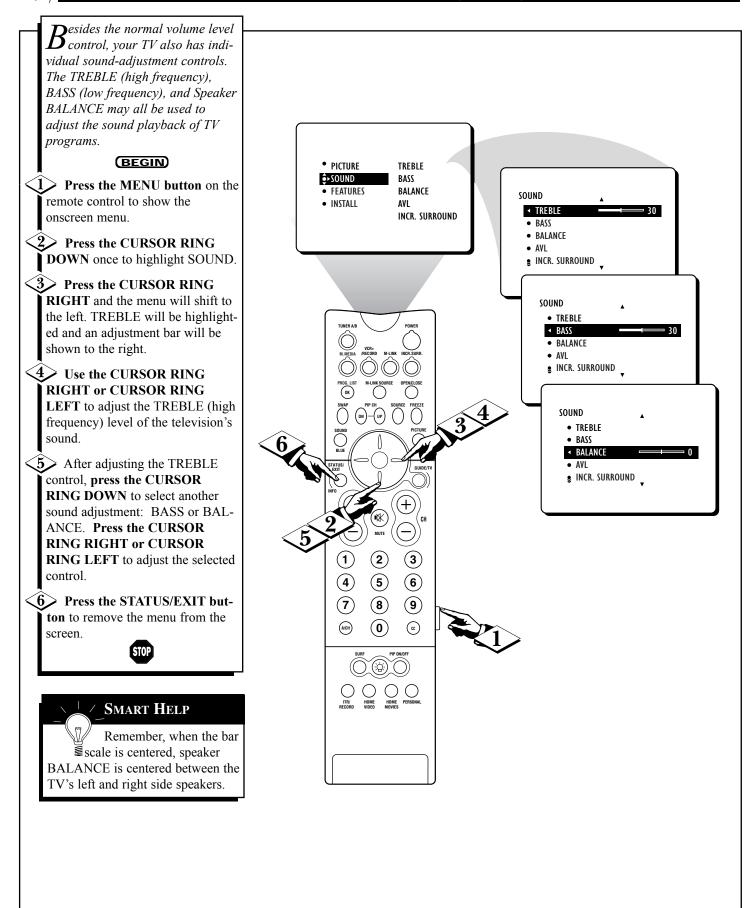


AUTOLOCKTM – VIEWING BLOCKED PROGRAMMING



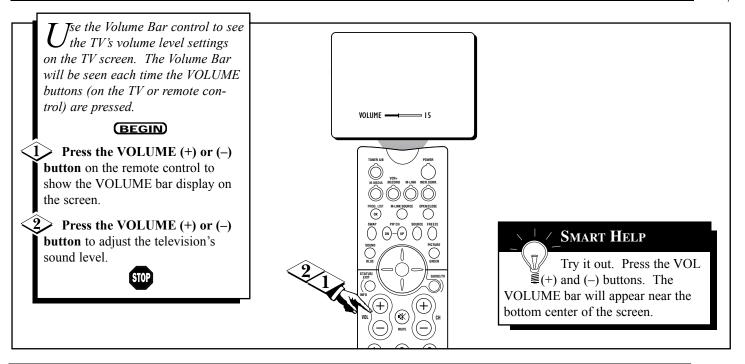


Sound – Adjusting the Treble, Bass, and Balance

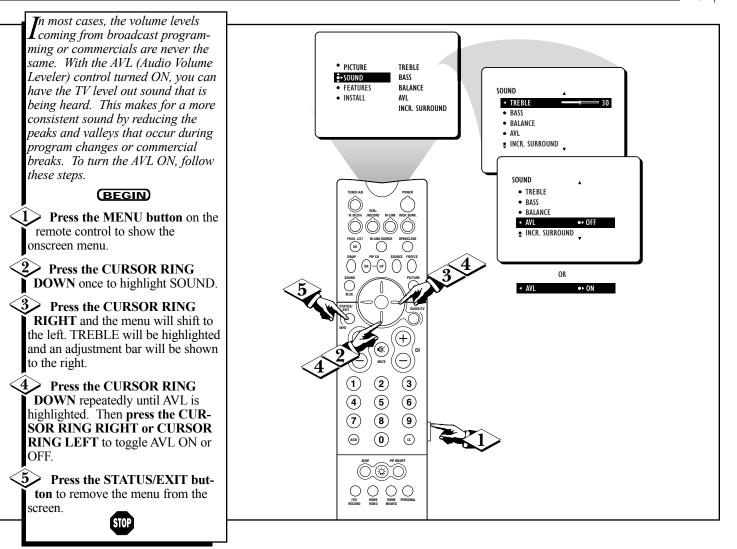


Sound – Adjusting the Volume



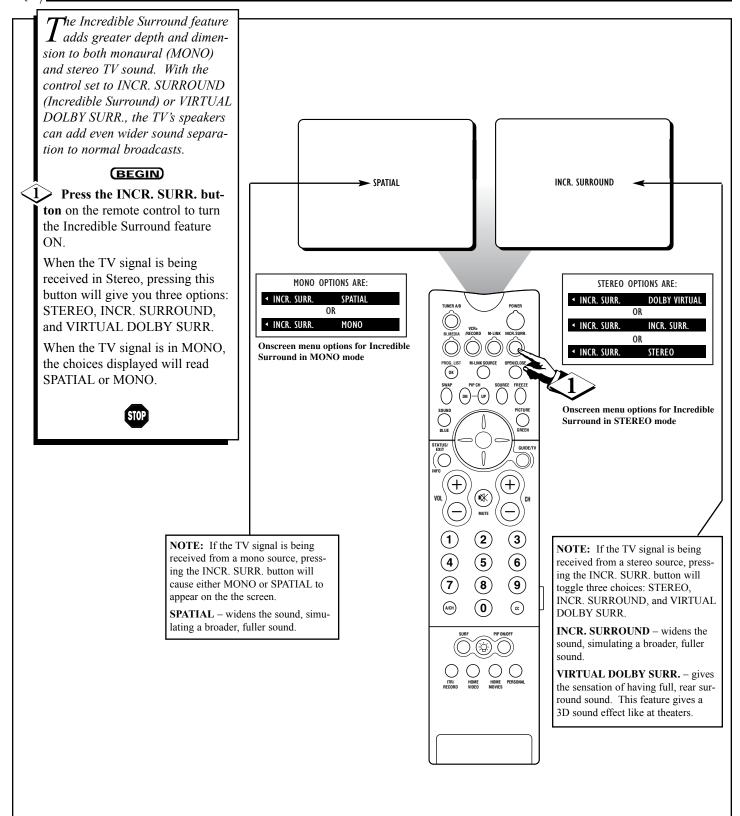


Sound – Using the AVL (Audio Volume Leveler)

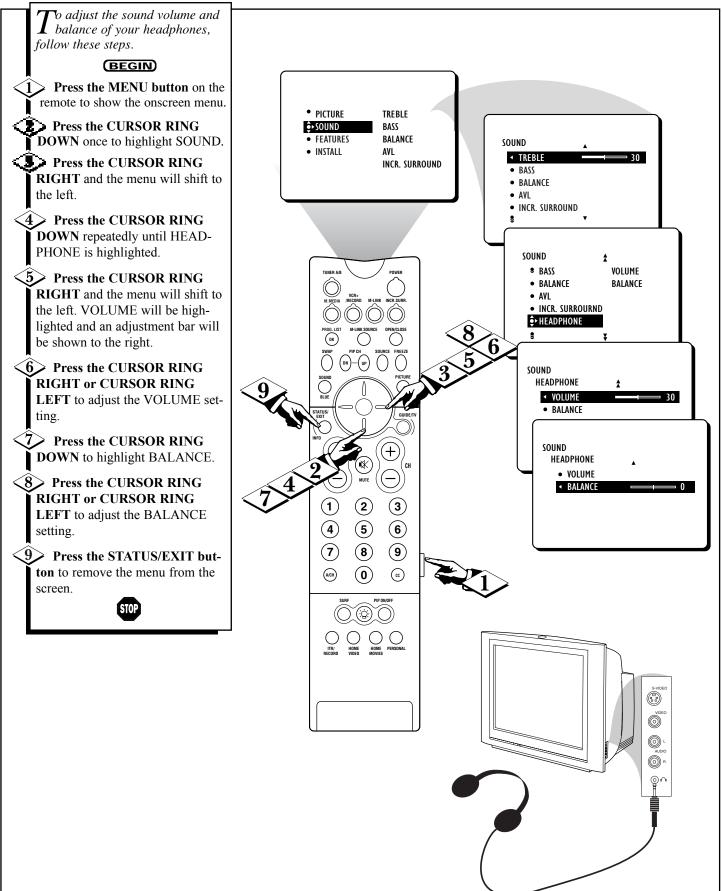


Sound – Using Incredible Surround

(((

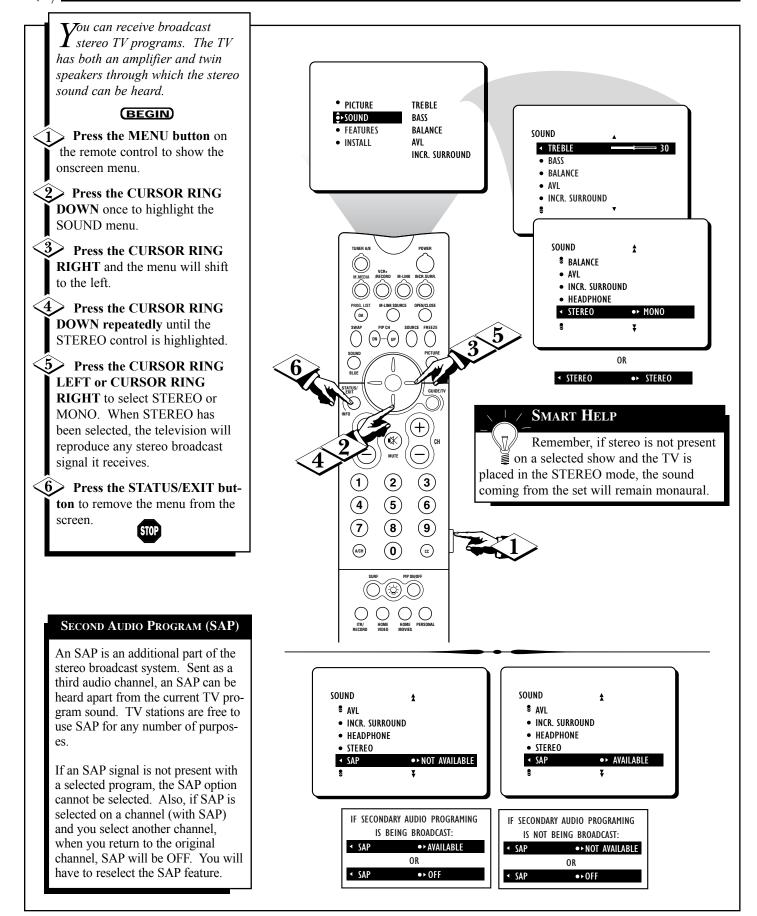


Sound – Adjusting the Headphone Settings



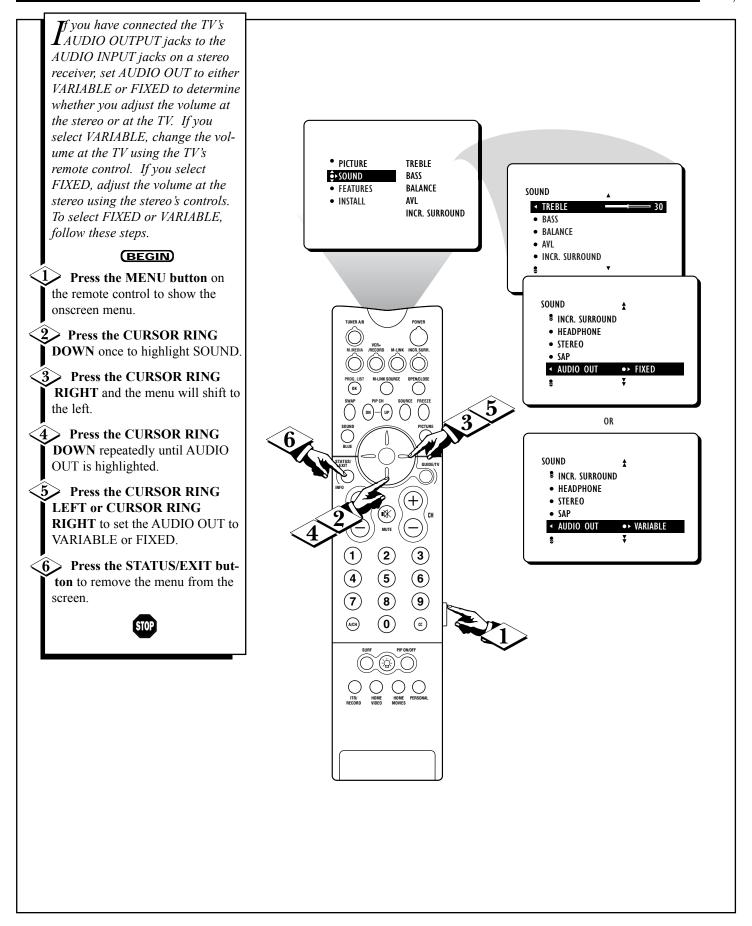
SOUND – SETTING THE TV FOR STEREO AND SAP

((((

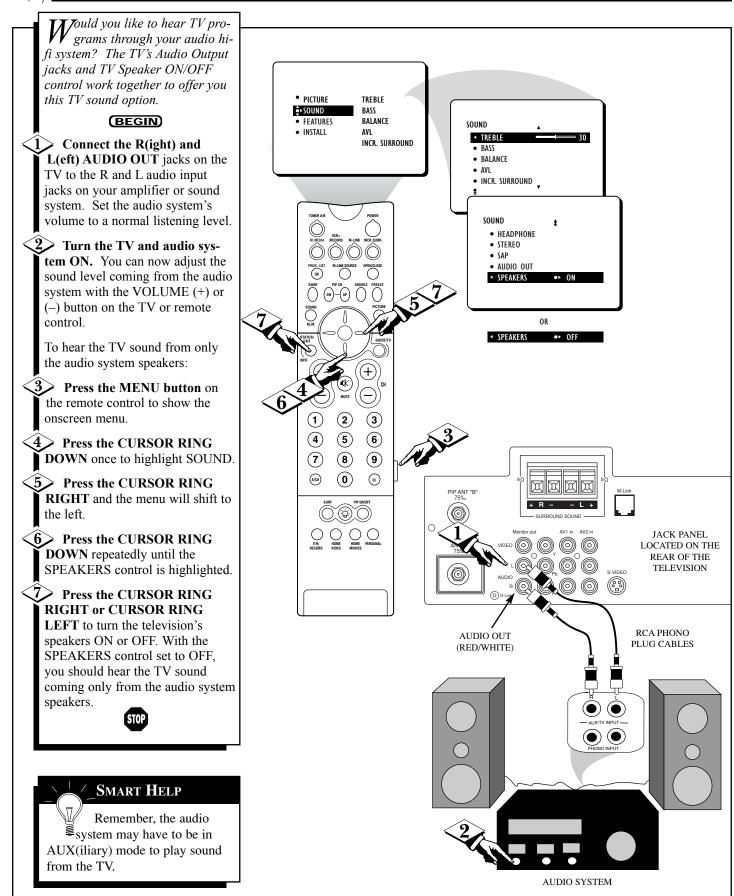


SOUND – SETTING THE AUDIO OUT CONTROL

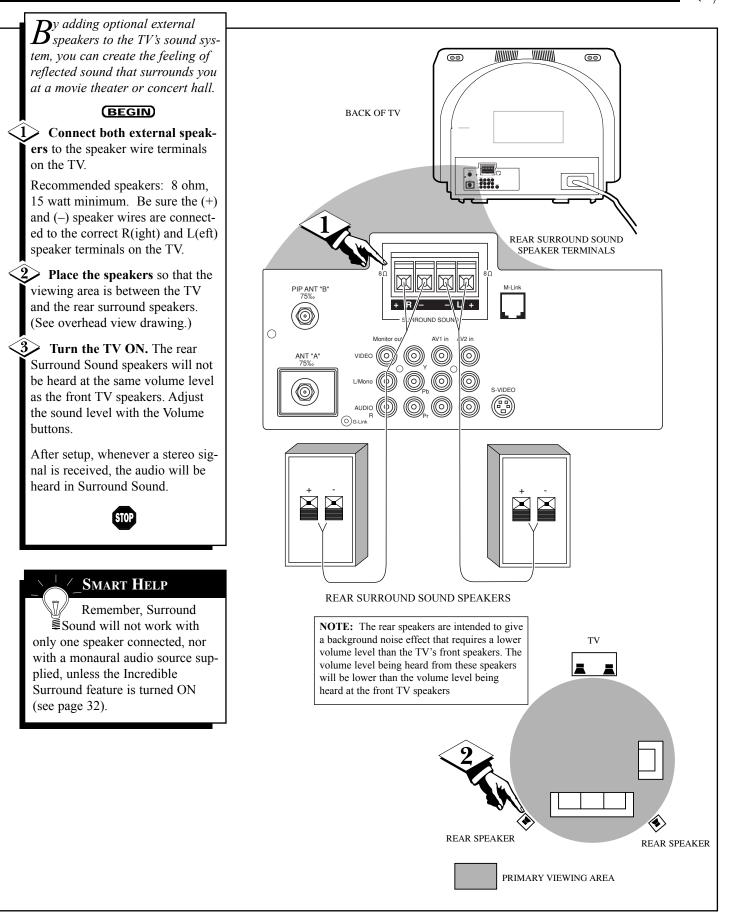
((



Sound – Using the TV Speaker Control and Audio Output Jacks



SOUND – USING THE SURROUND SOUND EXTERNAL SPEAKER CONNECTIONS



Sound – Using the Audio/Video Input Jacks

AUDIO/VIDEO INPUTS

The TV's audio/video input jacks are for direct picture and sound connections between the TV and a VCR (or similar device) that has audio/video output jacks.

(BEGIN)

Connect the VIDEO (yellow) cable to the VIDEO AV1 jack on the back of the TV. Then connect the AUDIO (red and white) cables to the AUDIO (left and right) AV1 jacks on the rear of the TV.

2 Connect the VIDEO (yellow) cable to the VIDEO OUT jack on the back of the VCR. Then connect the AUDIO (red and white) cables to the AUDIO (left and right) OUT jacks on the rear of the VCR.

3 Turn the VCR and the TV ON.

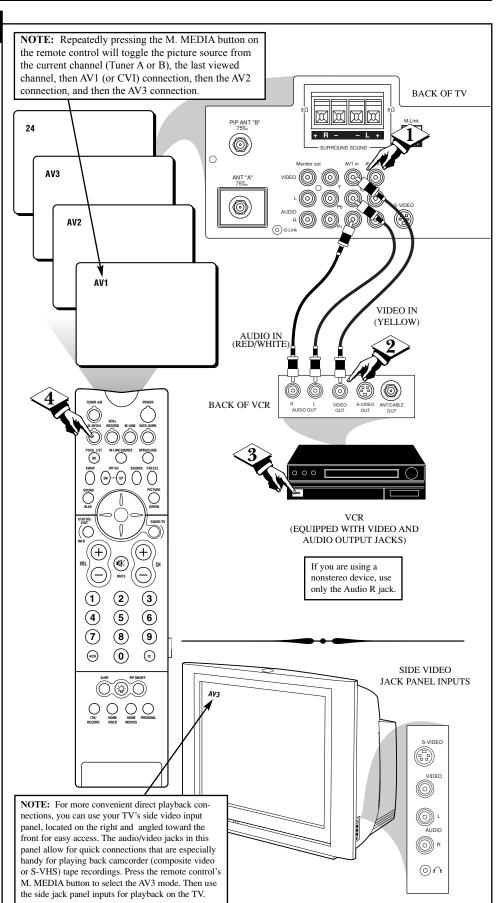
4 Press the M. MEDIA button on the remote control until the AV1 source is selected. After AV1 appears, insert a prerecorded tape into the VCR and press the PLAY button to view the tape on the television. If AV1 did not appear, perform steps 5–9.

NOTE: the actions described in steps 5–9 are not illustrated on this page.

- 5 If AV1 did not appear onscreen as one of the choices available to you by pressing the M. MEDIA button, press the M Link button on the remote control to display the M-Link[™] onscreen menu..
- 6 Press the CURSOR RING RIGHT or CURSOR RING LEFT button to highlight CVI.
- Press the CURSOR RING UP to toggle from CVI to AV1.
- Press the STATUS/EXIT button to remove the M-Link™ menu from the screen.

9 Press the M. MEDIA button to tune the AV1 source. You are now ready to view the VCR tape on the TV.

STOP



Sound – Using the Audio/Video Input Jacks (cont'd)

S-VIDEO INPUT

The S(uper)-Video connection NOTE: Repeatedly pressing the M. MEDIA I on the rear of the TV can probutton on the remote will toggle the picture BACK OF TV source from the current channel, the last vide you with better picture detail viewed channel, then the AV1 (or CVI) conand clarity for the playback of nection the AV2 connection and the AV3 conaccessory sources such as DBS nection. Use AV2 for S-Video Connections. (digital broadcast satellite), DVD (digital video discs), video games, \mathbb{M} PIP ANT "B' 24 and S-VHS VCR (video cassette + R recorder) tapes than the normal 0 antenna picture connections. AV3 ANT A **NOTE:** The accessory device must have an S-VIDEO OUT(put) \odot *jack in order for you to complete* AV2 я **()** B the connection on this page. O G-Link (BEGIN) <1> Connect the S-VIDEO AUDIO IN (RED/WHITE) AV1 CABLE to the S-VIDEO input jack on the rear of the television. S-VIDEO CABLE Then connect the AUDIO (red (NOT SUPPLIED) and white) cables to the AUDIO AV2 jacks on the rear of the TV. **2** Connect the S-VIDEO CABLE to the S-VIDEO output Ð 0 (jack on the accessory device. S-VIDEO OUT VIDEC Then connect the red and white IT/CA AUDIO cables to the AUDIO BACK OF ACCESSORY (left and right) output jacks on the rear of the accessory device. **3** Turn the accessory device ON. DBS, DVD, Video Game, etc. 4 Press the M. MEDIA button (EQUIPPED WITH S-VIDEO AND on the remote control to tune the AUDIO OUTPUT JACKS) AV2 channel. You are now ready (+)(+)to view the tape or disc on the NOTE: If you are using a TV. nonstereo device, use only the Audio R jack. STOP (3) $(\mathbf{1})$ (2) (4) (6) (5) **SMART HELP** (7)(8) (9) (A/CH) $(\mathbf{0})$ (10) The S-VIDEO and VIDEO AV2 in(puts) are in parallel. The S-VIDEO input is dominant when in use. If separate video signals are connected to the S-VIDEO and VIDEO AV2 in(puts), the signal from the VIDEO AV1 in(put) will not be usable. If you have added AV2 in(puts) to the TV's channel memory, just press the CHANNEL (+) or (-) button until the AV2 in(puts) (channel) mode is selected.

Sound – Using the Audio/Video Input Jacks (cont'd)

COMPONENT VIDEO INPUTS

Component Video inputs provide for the highest possible color and picture resolution in the playback of digital signal source material, such as with DVD players. The color difference signals (Pb, Pr) and the luminance (Y) signal are connected and received separately, which allows for improved color bandwidth information (not possible when using composite video or S-Video connections).

(BEGIN)

Connect the Component (Y, Pb, Pr) Video OUT jacks from the DVD player (or similar device) to the (Y, Pb, Pr) in(put) jacks on the TV.

2 Connect the red and white AUDIO CABLES to the Audio (left and right) output jacks on the rear of the accessory device to the Audio (L and R) AV1 in(put) jacks on the TV.

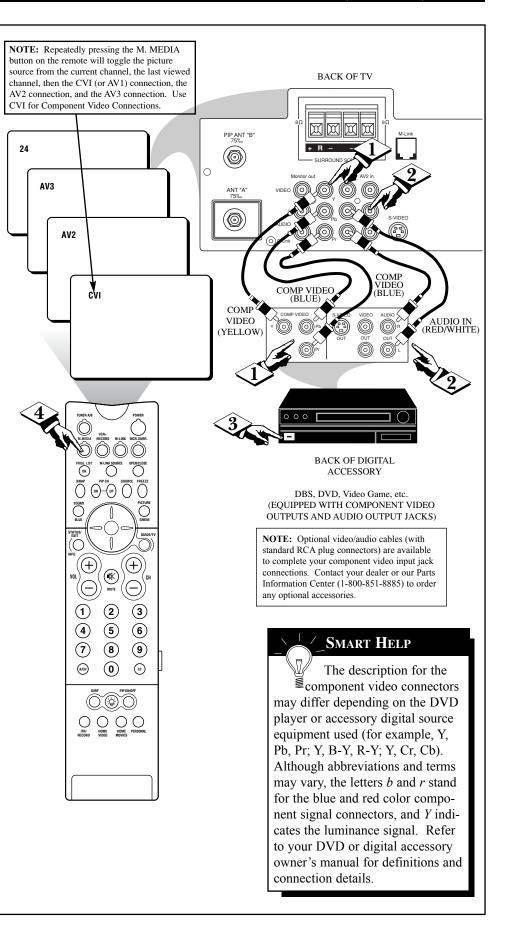
3 Turn the TV and the DVD (or digital accessory device) ON.

Press the M. MEDIA button on the remote control until the CVI source is selected. After CVI appears, insert a disc into the DVD (or other digital accessory device) and press the PLAY button to view the disc on the television. If CVI did not appear, perform steps 5–9.

NOTE: The actions described in steps 5–9 are not illustrated on this page.

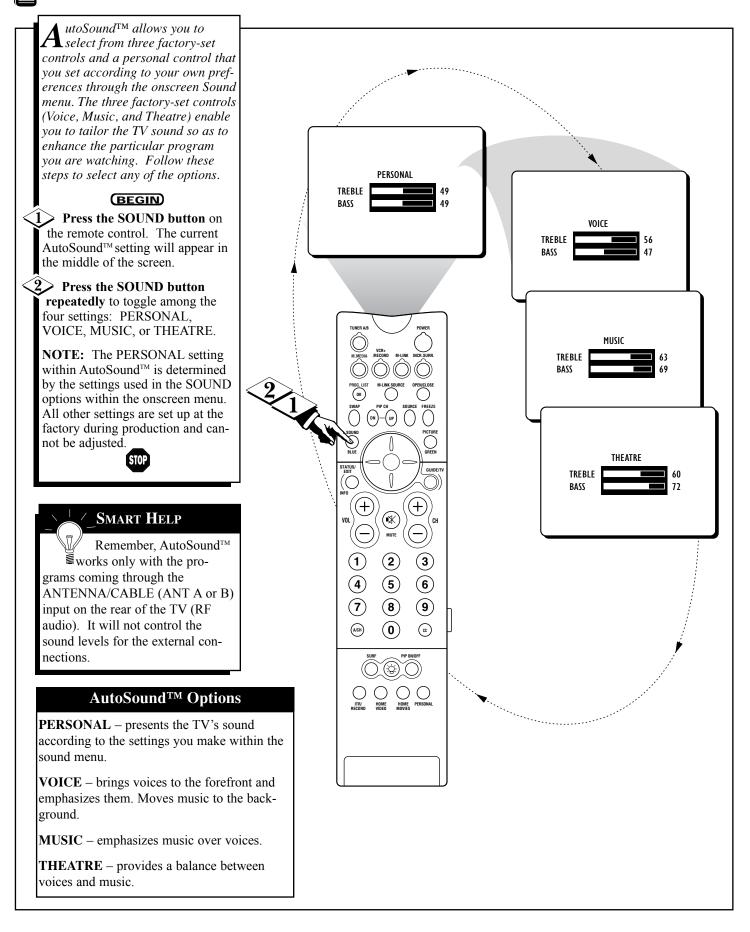
- 5 If CVI did not appear onscreen as one of the choices available to you by pressing the M. MEDIA button, press the M Link button on the remote control to display the M-Link[™] onscreen menu.
- 6 Press the CURSOR RING RIGHT or CURSOR RING LEFT to highlight AV1.
- Press the CURSOR RING UP to toggle from AV1 to CVI.
- 8 Press the STATUS/EXIT button to remove the M-Link[™] menu from the screen.

Press the M. MEDIA button to tune to the CVI source. You are now ready to view the disc on the TV.

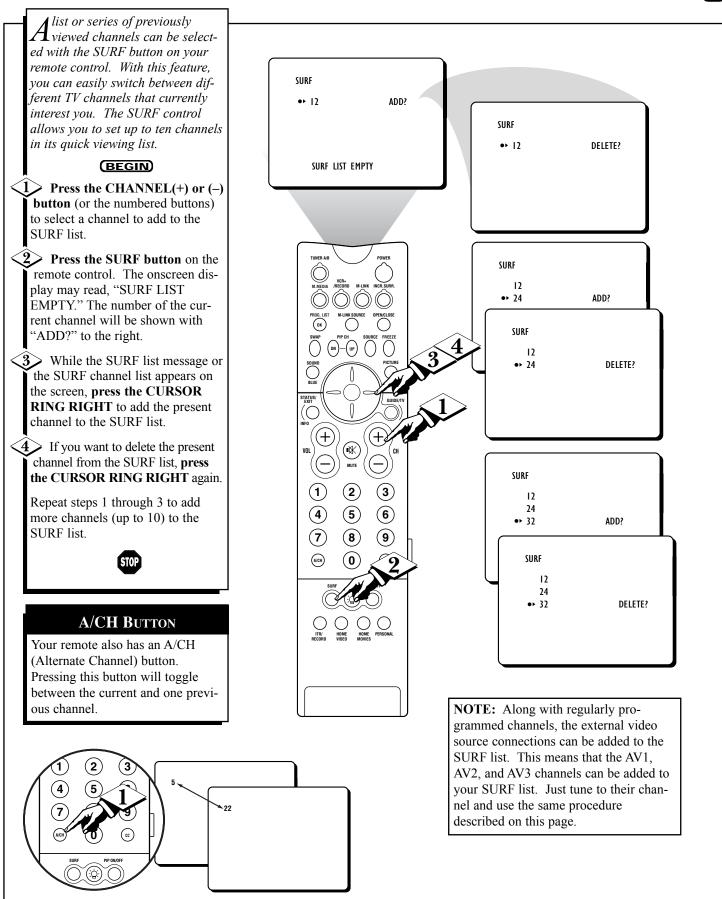


Thether you're watching a movie or a video game, your TV has automatic video control settings that will match with your current program source or content. AutoPictureTM quickly resets your TV's video controls for a number of different types of programs and viewing conditions that you may have in your home. The Movies, PERSONAL Sports, Weak Signal, and BRIGHTNESS 48 *Multimedia AutoPicture*TM controls COLOR 41 have been preset at the factory to PICTURE MOVIES 81 automatically adjust the TV's SHARPNESS 46 BRIGHTNESS brightness, color, picture, sharp-COLOR 31 PICTURE 20 ness, tint, and color temperature SHARPNESS Á 16 levels. The Personal AutoPictureTM settings are the ones that you made through the PICTURE options within the onscreen menu. SPORTS (BEGIN) BRIGHTNESS 62 COLOR 31 I> Press the PICTURE button PICTURE 62 on the remote control. The current SHARPNESS 16 OK AutoPicture[™] setting will appear in the middle of the screen. Press the PICTURE button WEAK SIGNAL repeatedly to select either PER-BRIGHTNESS 37 SONAL, MOVIES, SPORTS, COLOR 35 PICTURE 15 WEAK SIGNAL, or MULTI SHARPNESS 15 MEDIA picture settings. (+)(🕷 **NOTE:** The PERSONAL setting within AutoPictureTM is determined (3) $(\mathbf{1})$ (2) by the setting used in the PICTURE MULTI MEDIA BRIGHTNESS options within the onscreen menu. 40 4 (5) 6 COLOR 31 All other settings are set up at the $\overline{(7)}$ (9) PICTURE 20 (8) factory during production and can-SHARPNESS 26 not be adjusted. (00) (A/CH) $(\mathbf{0})$ STOP

REMOTE CONTROL – USING AUTOSOUNDTM



REMOTE CONTROL – USING CHANNEL SURF



VCR Plus+®

Within the GUIDE Plus+® GOLD system, there is an option to set a timer recording using the VCR Plus+® system. This system works with your local "TV Guide" or programming information printed in a special magazine or your local newspaper. The broadcasters have listed a multiple digit number next to the program listing. This is the PlusCode number needed to setup the recording. Please note that a VCR is required to use this system.

Follow the steps below to set a VCR Plus+[®] timer recording.

(BEGIN)

Press the VCR+/RECORD button on the remote to display the GUIDE Plus+® GOLD system Schedule onscreen menu asking you to: Enter Pluscode:------

Press the NUMBERED buttons on the remote to enter the PlusCode number for the desired program (find the code in the newspaper listings or "TV Guide" listings).

3 After the PlusCode number has been entered, **press the MENU button** on the remote to set the VCR Plus+[®] timer recording. The record information will appear in a red bar on the Guide Plus+[®] GOLD system Schedule screen.

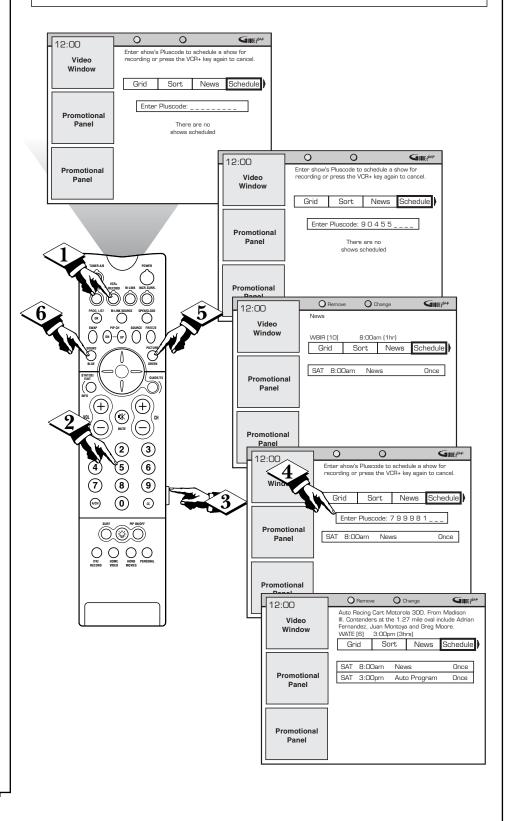
4 To add other VCR Plus+[®] codes repeat the steps above.

5 To change the the record frequency (ONCE, DAILY, WEEKLY) press the GREEN button located under the flip open door on the remote.

6 Press the BLUE button on the remote to remove the VCR Plus+[®] timer recording from the Schedule.

STOP

NOTE: Refer to the GUIDE Plus+TM GOLD Quick Use Guide supplied with your TV for a detailed description of GUIDE Plus+TM GOLD system and it's features.



PIP – BASIC CONNECTIONS

Picture-In-Picture (PIP) is the showing of two pictures on the TV screen at the same time (one main screen picture and one small picture, or PIP). For your ease and convenience, this TV has two separate inputs (ANTenna A and PIP ANTenna B) for your home's Antenna and/or Cable TV system signal.

The ANT A input is primarily for the TV's main screen picture. The PIP ANT B input is provided as a second dedicated source option for the TV's PIP "window" and its feature operations. The signal connected to the PIP ANT B input can be either a split signal input (as described in the section on this page) or another type of external signal source (such as a satellite dish system, additional home antenna, video accessory, etc.).

See the following steps on how channels connected to the PIP ANT(enna) B Input can be shown and used within the PIP window.

(BEGIN)

Connect your Antenna or Cable TV signal to the single, 75-ohm input plug on a two-way signal splitter (not supplied).

Connect two lengths of RF coaxial cable (F-type connectors on both ends) to the two output plugs on the two-way signal splitter.

2 Connect the twin OUTPUT plugs on the signal splitter to the ANT A and PIP ANT B inputs on

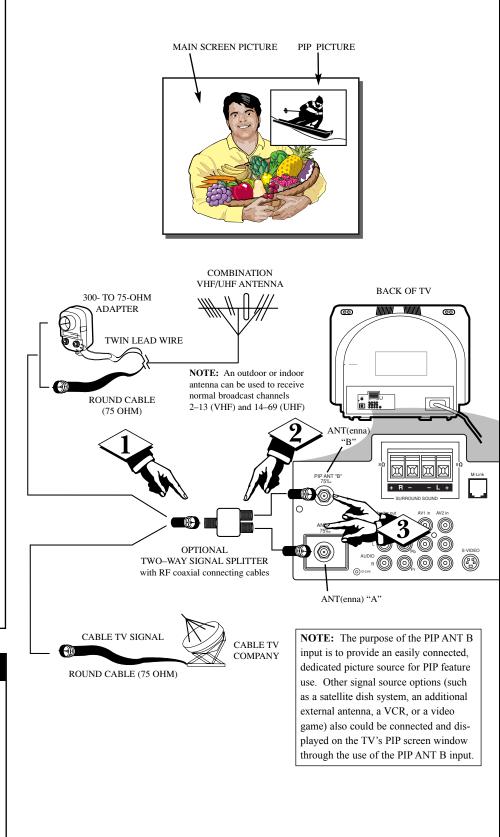
the rear of the TV.

SMART HELP

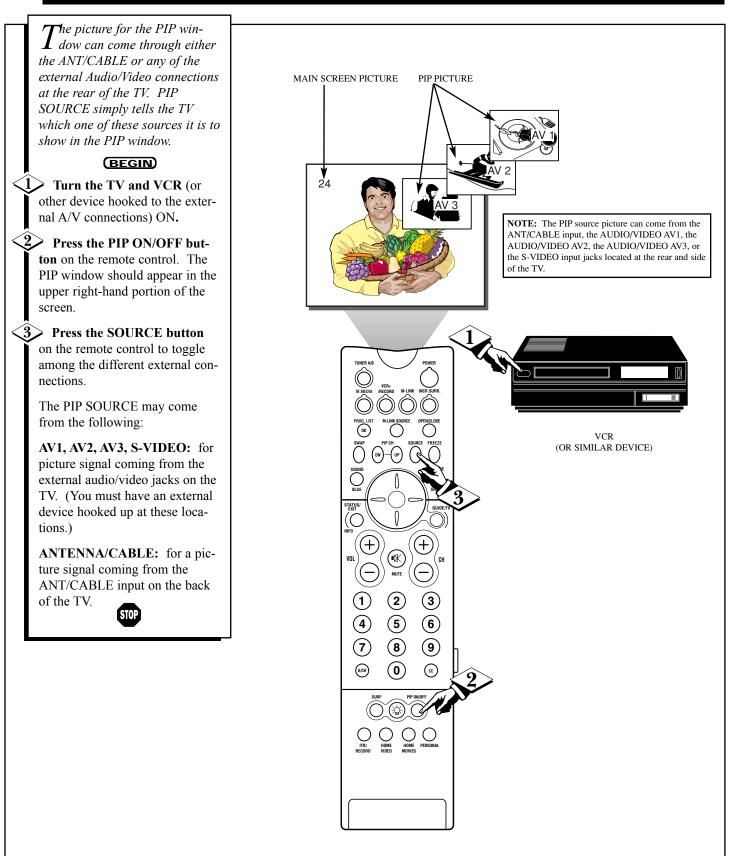
For other possible PIP connections see the "More Connections" section on pages 50–51.

If you need any accessories or parts to complete the described PIP connections, contact your dealer, or call our Parts Information Center at:

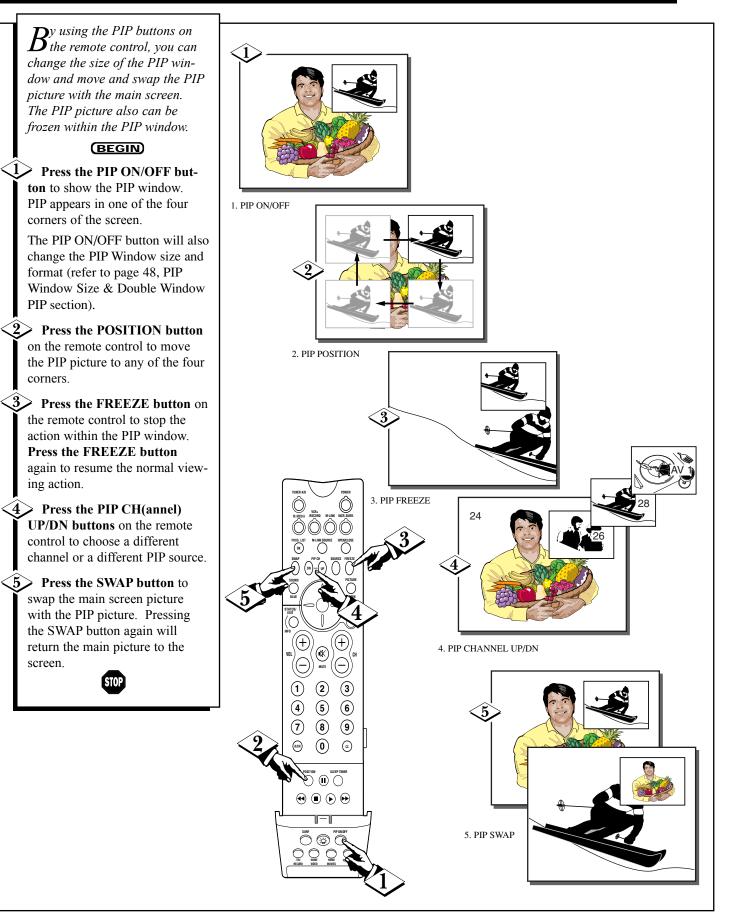
1-800-851-8885



PIP – SELECTING THE SIGNAL SOURCE



PIP – REMOTE CONTROL BUTTONS



PIP WINDOW SIZE & DOUBLE PIP WINDOW

The PIP Window can be viewed in a number of sizes. There is a large and small PIP Window along with a Double PIP Window (two pictures appearing side-byside) that can be set two different ways. The steps below show how to access the PIP Window and how to size them.

BEGIN

Press the PIP ON/OFF button on the remote to show the PIP Window. The PIP window will appear in the *LARGE* format.

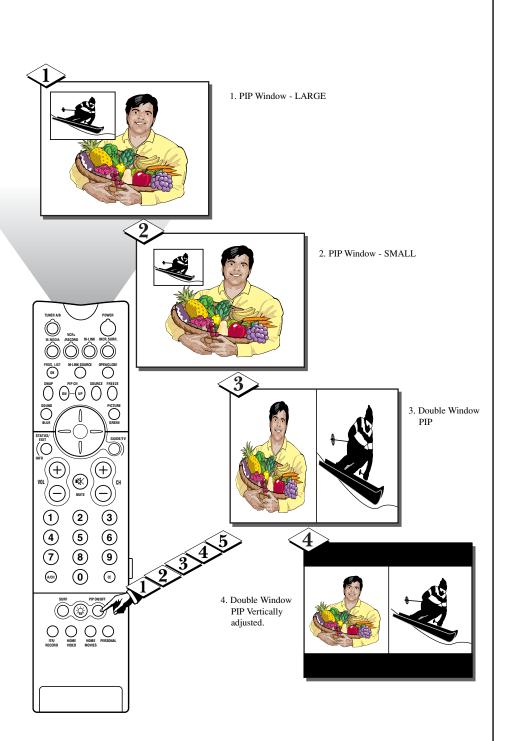
2 Press the PIP ON/OFF button on the remote again and the PIP Window will reduce in size to the *SMALL* format.

3 Pressing the PIP ON/OFF button on the remote a third time will show a Double Window PIP. The main picture source will be show on the left and the PIP picture source on the right. (Note: These picture sources can be swapped as described on page 47.)

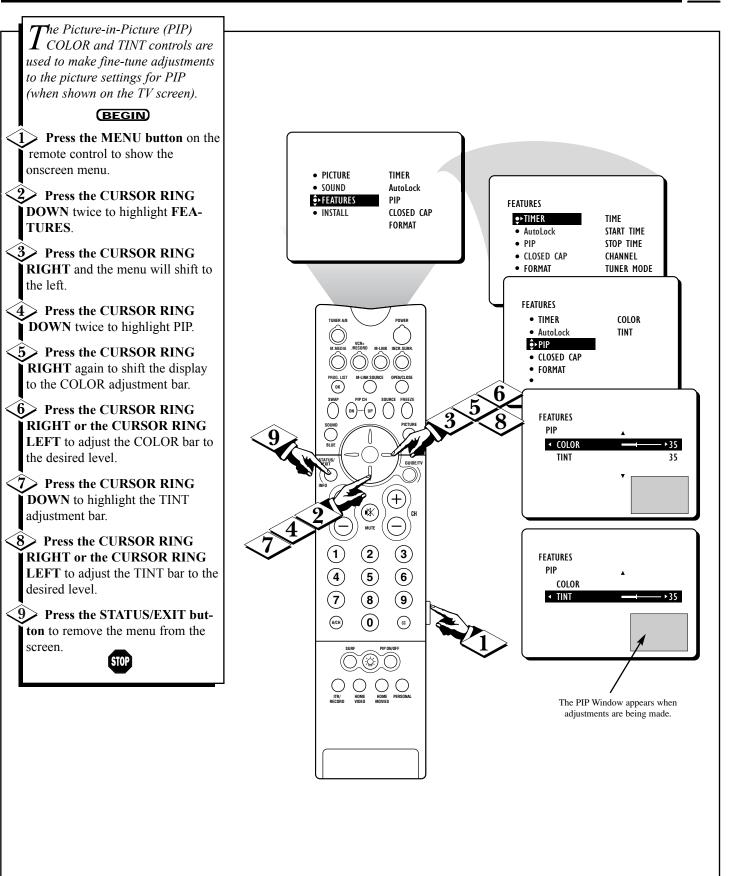
4 Press the PIP ON/OFF button on the remote a forth time and the Double Window PIP will display the two pictures in their proper format. The vertical height of the pictures will be adjusted to show proper viewing proportions.

5 Press the PIP ON/OFF button a fifth time and the PIP window will be shut OFF.

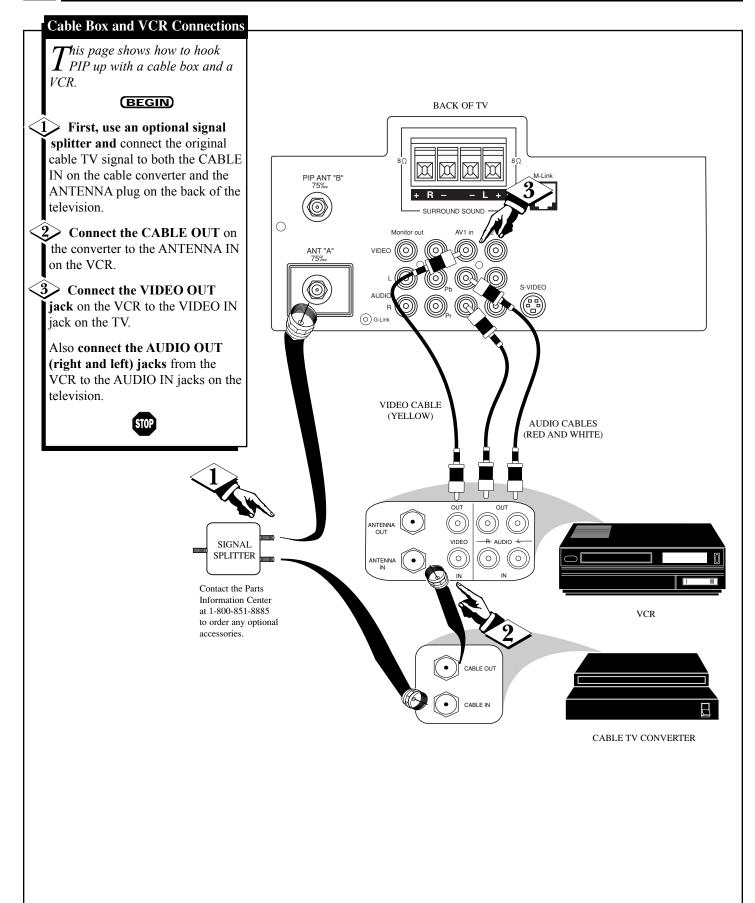
STO



ſ 🔳



PIP – MORE CONNECTIONS



VCR and DVD Connections

The steps for hooking up a VCR (video cassette recorder), DVD (digital video disc player), or similar device to work with PIP are shown here.

(BEGIN)

First, connect the original cable TV signal or antenna signal to the ANTENNA IN jack on the back of the VCR.

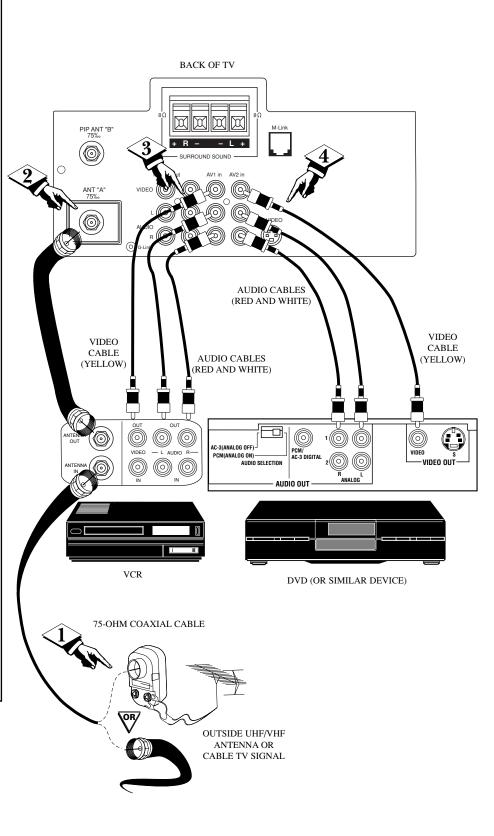
2 Connect the ANTENNA OUT jack on the back of the VCR to the ANT(enna) "A" jack on the back of the TV.

3 Connect the yellow video cable from the VIDEO OUT jack on the VCR to the AV1 in(put) VIDEO jack on the TV. Then connect the red and white audio cables from the AUDIO OUT jacks (L and R) on the VCR to the AV1 in(put) AUDIO jacks on the back of the TV.

4 Connect the yellow video cable from the VIDEO OUT jack on the DVD or similar device to the AV2 in(put) VIDEO jack on the TV. Then connect the red and white audio cables from the AUDIO OUT jacks (L and R) on the DVD or similar device to the AV2 in(put) AUDIO jacks (L and R) on the back of the TV.

NOTE: Remember that when you are selecting the PIP SOURCE, the VCR will appear on the AV1 channel and the DVD or similar device will appear on the AV2 channel.

STOP



TROUBLESHOOTING

Please make these simple checks before calling for service. Because charges for TV installa- tion and adjustment of customer controls are not covered under your warranty, these tips can save you time and money.	CAUTION: A video source (such as a video game, compact disc interactive [CDI], or TV information channel) that shows a constant nonmoving pattern on the TV screen can cause picture tube damage. When your TV is continuously used with such a source, the pattern of the nonmoving portion of the game (or other source) can leave a permanent image on the picture tube. When you're not using the video source, turn it OFF. Also, regularly alternate the use of such video sources with normal TV viewing.
No Power	 Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the POWER button again. Check that the outlet is not on a wall switch. Be sure the fuse is not blown on the AC power strip, if one is being used.
No Picture	 Check antenna connections. Are they properly secured to the TV's ANT A/B 75Ω plug? Check the TUNER MODE control for the correct tuner setting. Try running the Auto Program feature to find all available channels. Press the SOURCE button on the remote to make sure the correct signal source is selected (AV1 [or CVI], AV2, AV3, or S-VIDEO).
No Sound	 Check the VOLUME buttons. Check the MUTE button on the remote control. Check the SPEAKER onscreen control. If it is in the OFF position, sound at the set will be eliminated. If you're attempting to hook up auxiliary equipment, check the audio jack connections. (If applicable) Check the audio receiver for the correct operating mode.
Remote Does Not Work	 Check the batteries. If necessary, replace them with AA Heavy Duty (Zinc Chloride) or Alkaline batteries. Clean the remote control and the remote control sensor window on the TV. Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the POWER button again. Be sure the fuse is not blown on the AC power strip, if one is being used. Check to be sure the TV outlet is not on a wall switch.
TV Displays Wrong Channel or No Channels Above 13	 Repeat channel selection. Add the desired channel numbers (using the CHANNEL EDIT control) into the TV's memory. Check to be sure the TUNER MODES are set to the CABLE option and run the Auto Program feature to find all available channels.
Cleaning and Care	 To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning. When you are cleaning the TV, take care not to scratch or damage the screen surface (avoid wearing jewelry or using anything abrasive). Wipe the front screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning. Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool, clear water. Use a clean, dry cloth to dry the wiped surfaces. Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.

GLOSSARY OF TELEVISION TERMS

Alternate Channel • The feature that allows you to toggle between the last two channels viewed by pressing the A/CH button on the remote control.

Auto Programming • The feature that, when activated, scans for all available channels from regular antenna or cable signals and stores only active broadcast stations in the TV's memory.

Channel Edit • The feature that allows you to add or delete channels from the list of channels stored in the TV's memory. Channel Edit makes it easy to limit or expand the number of channels that are available to you when you press the Channel (+) or (-) buttons on your remote control.

Closed Captioning • The broadcast standard feature that allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, Closed Captioning uses onscreen "text boxes" to show dialogue and conversations while a TV program is in progress.

Coaxial Cable • A single, solid antenna wire normally matched with a metal plug (F type) end connector that screws (or pushes) directly onto a 75-ohm input found on the television or VCR.

Direct Audio/Video Inputs • Connectors, located on the rear of the TV, used for the input of audio and video signals. These inputs are designed for use with VCRs (or other accessories) in order to receive higher picture resolution and offer sound-connection options.

Identify • The method by which a TV remote control searches and finds an operating code for another product (such as a VCR or a cable converter). After the code has been "identified," the TV remote control can operate and send commands to the other product.

Incredible Stereo (or Surround) • False acoustic management of the audio signal that produces a dramatic expansion of the wall of sound that surrounds the listener and heightens overall viewing pleasure.

Menu • An onscreen listing of feature controls that are available for you to adjust.

Multichannel Television Sound (MTS) • The broadcast standard that allows for stereo sound to be transmitted with the TV picture.

Onscreen Displays (OSD) • The wording or messages generated by the television (or VCR) to help you with specific feature controls (color adjustment or programming, for example).

Picture-in-Picture • The showing of two pictures on the TV screen at the same time (one main screen picture and one small picture, or PIP).

Programming • The process of adding or deleting channel numbers into the television's memory circuits. Through programming, the TV "remembers" only the locally available or desired channel numbers and skips over any unwanted channel numbers.

Remote Control Sensor Window • The window or opening found on the television control panel and through which infrared remote control command signals are received.

Second Audio Program (SAP) • An additional audio channel provided for within the Multichannel Television Sound (MTS) broadcast standard. The most frequently proposed use for SAP is the simultaneous bilingual broadcast of TV material.

Status/Exit Button • The remote-control function that allows you to quickly confirm what channel number is being viewed. *Status/Exit* also can be used to clear the television of onscreen displays or information (rather than waiting for the displays to "time out," or automatically disappear from the screen).

Twin–lead Wire • The more commonly used name for the twostrand, 300-ohm antenna wire used with many indoor and outdoor antenna systems. In many cases, this type of antenna wire requires an additional adapter (or balun) in order to connect to the 75-ohm input terminals designed into the more recent TVs and VCRs.

INDEX

Accessories/Optional Parts			
Alternate Channel Button (A/CH)			
Antenna Hookup*Q/U-1			
Audio Out Control			
Audio Output Jacks			
Audio/Video Input Jacks			
AutoChron™ Control*Q/U-4			
AutoLock TM			
Access Code			
Blocking Channels			
Block No Rating Programs			
Block ON/OFF Control			
Block Unrated Programs			
Movie Ratings			
Review AutoLock TM Settings			
TV Ratings			
Understanding AutoLock TM			
Viewing Blocked Programming/Channels			
AutoPicture TM Controls			
Auto Program Channels Control*Q/U-3			
AutoSound TM Controls			
AVL (Audio Volume Leveler) Control			
Balance Control			
Bass Control			
Blue Mute Control			
Cable Box Connection*Q/U-1			
Cable TV Hookup*Q/U-1			
Channel Edit Control*Q/U-4			
Channel Name Control*Q/U-4			
Clock			
Closed Captioning Control			
Component Video Input Jacks40			
DVD (or similar device) Hookup			
Dynamic Noise Reduction (DNR) Control7			
External Speaker Connections			
Features			
Format (Screen) Control			
Guide Plus+ [®] Demo1			
Headphone Controls			
Glossary of Television Terms			

ImageMax TM	7
Incredible Surround	
Language Control	*Q/U-3
M-Link-specific Remote Control Buttons	
(M Link, ITR/REC, Home Video, Home Movies,	
Personal)	*Q/U-2
Picture Adjustment Controls	6
PIP (Picture-in-Picture)	
Color/Tint Control	
Connections	45, 50–51
Remote Control Buttons	
Source Control	46
Window Size/Double Window	
Registration/Welcome	
Remote Control	
Battery Installation	*Q/U-2
Buttons	*Q/U-2
S-Video Input Jacks	
Safety/Precautions	
SAP (Second Audio Program) Control	
Sleep Timer Control	
Start Time	
Activate Control	
Channel Control	
Control	14
Stereo/Mono Control	
Stop Time Control	15
Surf Control	43
Surround Sound (Connections)	
Table of Contents	4
Timer Display Control	19
Troubleshooting	52
Treble Control	
Tuner Mode Control	*Q/U-3
TV Keypad (Buttons)	*Q/U-2
TV Speaker Control	36
VCR Connections	
VCR Plus+® Feature	
Volume Control	
Warranty	55

* Refer to the Quick Use and Installation Guide for information.

RENEWED 90 DAY LIMITED WARRANTY